DOCUMENT RESUME

ED 158 060 CE 017 516

TITLE	National Training Course. Emergency Medical Technician. Paramedic. Instructor's Lesson Plans. Module II. Human Systems and Patient Assessment.
INSTITUTION	National Highway Traffic Safety Administration (DOT), Washington, D. C.
REPORT NO	DOT-HS-802-439
PUB DATE	77
NOTE	109p.; For related documents see CE 017 514-529; The student text and workbook will be available separately
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock Number 050-003-00281-0)
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	Behavioral Objectives; *Clinical Diagnosis; Clinical Experience; Curriculum Guides; *Emergency Squad Personnel; *Human Body; Job Skills; *Job Training; Learning Activities; Lesson Plans; *Medical Vocabulary; Paramedical Occupations

ABSTRACT

This instructor's lesson plan guide on human systems and patient assessment is one of fifteen modules designed for use in the training of emergency medical technicians (paramedics). Four units are presented: (1) medical terminology, which covers some common prefixes and suffixes and the use of the medical dictionary; (2) an overview of the functions of the human body and its systems (anatomy and physiology); (3) patient assessment, including the patient's medical history, physical examination, and transfer of collected information to the supervising physician; and (4) clinical experience in the emergency department, the intensive care/coronary unit, the morgue, and the mobile intensive care unit. Each unit contains these elements: behavioral objectives, teaching procedures, a content outline, demonstration outlines, a list of needed equipment and materials, and guidelines for activities to be performed by students applying the skills. For skills taught, student evaluation sheets are provided. It is suggested that each module can be presented individually or combined with other modules to construct a course for a selected group of students. (CE 017 514 is a course guide for use in program planning and administration of the modules.) (JH)

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National Training Course
EMERGENCY MEDICAL TECHNICIAN
PARAMEDIC
INSTRUCTOR'S LESSON PLANS

Module – II

Human Systems and Patient Assessment

CE 017 516

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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U.S. Department of Transportation
National Highway Traffic Safety Administration

National Training Course

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC

INSTRUCTOR'S LESSON PLANS

Module – II

Human Systems and Patient Assessment

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For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

Stock No. 050-003-00261-0

CE 017 516

HOW TO USE THE INSTRUCTOR LESSON PLANS

NOTES

The *Instructor Lesson Plans* are guides for teaching an advanced-level training program for emergency medical technicians. The *Plans* cannot be used by the instructor to develop the competency to conduct the program; the instructor should have this as a prerequisite to teaching the course.

The *Instructor Lesson Plans* are comprised of 15 modules, each containing the information and instructions needed to conduct a program on a particular subject. Each module can be used by itself or in concert with other modules.

Each module is subdivided into instructional units that deal with a particular segment of the module subject. Generally, the units contain the following components:

- *Performance Objectives.* These are classified as knowledge (K) objectives or skill (S) objectives. They are written in behavioral terms so they can be evaluated either through observation of student activities or through results obtained under specified conditions.
- *Unit Activities.* Reading assignments, reference materials, and outside activities are presented for both the students and the instructor. If the activities are identical, only the instructor's activities are presented.
- *Equipment and Materials.* Educational equipment includes chalkboard, overhead projector, slide projector, and screen. Medical equipment and materials required are drawn from those listed in Appendix F of the *Course Guide*.

- *Content Outline.* This presents the topics to be covered during the presentation of the unit. Where appropriate, it is divided into single skills or concepts. This approach gives the instructor the flexibility to add or delete specific skills and information. The content outline also provides directions to the instructor indicating when the use of demonstrations or group discussions would be most appropriate.

  Because the units are designed to be taught by technically competent instructors, the content outlines are not specific; they only enumerate topics and subtopics. It is expected that the instructor's skill and knowledge will supplement the depth of the course content outline. The instructor is encouraged to prepare additional notes.

- *Demonstration Outlines.* These are designed to present procedural steps that are important in performing the particular skill or calculation. Steps that are critical or that may lead to common errors are emphasized. Where critical steps exist, these outlines suggest what should be demonstrated.
- *Practice Sessions.* These sessions serve as guides to activities to be performed by students applying the skills. They may be performed in the classroom or assigned as homework. During classroom practice sessions, the instructor will be available to observe and correct student performance and to answer any questions.
- *Skill Evaluations.* The skill evaluation sheets provide checkpoints for the instructor to use to insure that students are following appropriate procedures or sequences. Skill evaluation sheets also provide a convenient method for feedback to students having particular problems with a given skill, and for monitoring a student's progress in attaining skill objectives.

  The skill evaluation should occur only after the students have had an opportunity to practice the skill under the supervision of the instructor. The skill evaluation sheets can be distributed during, or before, the demonstration or practice session. Thus, they can be used as a job aid during practice. They should not be used, however, as a job aid while the student is being evaluated. The sheets are designed to provide a learning and evaluation tool

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and are not intended to mandate performance in the field in a set manner, irrespective of the patient's condition or situation.

NOTES

Satisfactory performance of a given skill is defined as the correct performance of all steps in the proper sequence. The instructor's judgment is required to define correct performance and sequence of steps in a skill. Skill evaluations may be repeated at intervals throughout the course to assess skill decay and the need for remedial practice. Some instructors may wish to test skills immediately after they have been learned and again at the conclusion of the course.

The alphanumeric coding system is used to identify the various modules and units. When you see, for example, in Module II, **3.6.1.K**, the **3** indicates the unit, the **6** indicates the main instructional topic, the **1** indicates the subsection of the major topic outlined in **3.6**, and the **K** indicates the teaching objective (in this case, knowledge).

To illustrate further, **3.6.1.K** would translate into:

3 = Unit number
6 = The main topic of the instructional section (The first two numbers—e.g., **3.6**—refer to a major heading in the unit content outline.)
1 = A subsection of the major topic outlined in **3.6** (This number relates to the number of objectives listed under skill or knowledge objectives and not to the content outline.)
K = Knowledge objective
S = Skill objective

The three-digit reference numbers (e.g., **3.6.1**) within each module refer to the topical section in that module only. For example, in Module II, any topical heading with **3.6** as the first two digits refers to the discussion of the components of patient assessment in Unit 3.

A visual presentation of Unit 3, by Module II, of the coding system is presented on the following pages.

SAMPLE PAGE

CODING SYSTEM EXAMPLES

NOTES

- Abdomen
- Extremities

3.6.1.K Given a situation describing a patient with a possible illness or injury who may or may not be able to communicate, the student should be able to describe the procedure for evaluating the patient described. Minimally, the student should include the appropriate primary assessment and specify the order of the four components of the secondary assessment and the areas of the assessment that would be emphasized.

the demonstration, auscultation of the lung, heart, and abdominal sounds.

3.6.1.S Given a student posing as a communicative patient, the student should be able to demonstrate the procedure for conducting a patient assessment when the patient is suspected of having the following:

SAMPLE PAGE

CODING SYSTEM EXAMPLES

NOTES

8. Practice Session 3

3.6. Four components of assessment (order)

A. If the patient can communicate, determine if he has a medical or trauma-related problem.

1. If a medical problem, the general order should be:
   a. Evaluate the diagnostic and vital signs.
   b. Develop the patient's history.
   c. Examine for a medical problem.

Skill Evaluation 3.6.1.S: Assessment of a Communicative Patient With a Suspected Trauma-Related Problem

Place an "X" in the appropriate column to indicate steps that are incorrect, out of sequence, or omitted. The student should be given three attempts to perform the skill.

Equipment

Student posing as a victim
Stethoscope

Clinical Training

To present this program, it will be necessary to have access to the clinical units listed below. If a unit is not available, adjustments should be made to insure that the activities proposed for that unit are included in others. Specific guidelines for the clinical units are included in the modules. The student's training should be supervised in each of the following clinical areas:

- Emergency department
- Intensive care unit/coronary care unit
- Operating/recovery room
- Intravenous (IV) team
- Pediatric unit
- Labor suite/delivery room/newborn nursery
- Psychiatric unit
- Morgue
- Mobile intensive care unit

Sample forms for maintaining student activity records are included in the *Instructor Lesson Plans*. The forms are designed so that the medical director can determine the number of times, and how successfully, a student has performed a skill. The medical director also will be able to determine how much time the student needed to become proficient in the skill. Further, the medical director will be able to evaluate student performance under a number of preceptors, because certain skills are repeated in various clinical units (e.g., initiating an IV is performed by the student with the IV team and in the emergency department and intensive care unit).

Although the clinical experience is listed with the module, it need not be presented each time, even if a number of modules are being presented.

Testing and Evaluating the Student

It is recommended that each student be evaluated on proficiency of skill and knowledge at the completion of each module. Skill evaluation sheets have been provided for each skill in each unit. These sheets can be used as guides for evaluating the student's skill proficiency. The evaluation of the knowledge objectives is left to the discretion of the instructor, according to predetermined objectives.

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Testing of knowledge should stress areas of clinical relevance over basic science. No matter what type of evaluation system is used, students should be kept informed of their progress and should be given additional activities to supplement weak areas.

As previously stated, the emphasis is on student competency, rather than on the total number of hours the student is involved in the program. Thus, it is possible for the student to be tested and given credit for any module. The medical director should not assume the student's competency simply because of prior training, but should develop an evaluation method to determine the student's proficiency based on first-hand observation and experience. With this type of method, it is possible for students to receive credit for prior training experience. This would be especially applicable for those modules that are primarily a review of skills concerned with Emergency Medical Technician-Ambulance; for example, soft-tissue injuries and rescue.

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MODULE II HUMAN SYSTEMS AND PATIENT ASSESSMENT

INTRODUCTION

Prerequisites

The students must have successfully completed the following module:

I. The Emergency Medical Technician, His Role, Responsibilities, and Training

Description of Module

Following is a summary of the topics discussed in this module:

Unit 1. Medical Terminology: Deals with common prefixes and suffixes and the use of a medical dictionary.

Unit 2. Human Systems (Anatomy and Physiology): Gives an overview of the human body and its systems. Emphasis is placed on the understanding of the functions of human systems and subsystems. Very little emphasis is placed on structure. Caution should be exercised when presenting this unit—it is only an overview; specific anatomy and physiology of the various systems and subsystems are discussed in more detail in other modules. For example, in this unit, anatomy and physiology of the respiratory system are briefly presented. Module V deals with the anatomy and physiology of the respiratory system in greater detail.

Unit 3. Patient Assessment: Discusses the skills needed to obtain a patient's history (immediate, medical, and family), to conduct a

primary and secondary assessment, and to take diagnostic and vital signs. The skills are discussed and demonstrated, and the student is given an opportunity to practice them.

Unit 4. Clinical Experience: Provides the student with direct experience in the following areas:

- Emergency department
- Intensive care unit/coronary care unit
- Morgue
- Mobile intensive care unit

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UNIT 1 emt-p

MEDICAL TERMINOLOGY

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Knowledge Objectives

After completing this module, the student should be able to correctly respond to at least 80 percent* of the following:

1.1.1.K Given a list of medical terms with common prefixes, suffixes, or both, the student should be able to underline the prefixes, suffixes, or both and state their meanings, for example, myocardium (heart muscle).

1.2.1.K Given a list of words, the student should be able to locate them in a medical dictionary.

Instructor Activities

Assign the material listed below during the class period immediately before beginning the unit:

- Chapter 2, Unit 1, of the *Text*
- Knowledge objectives for this unit

Prepare a lecture following the content outline on page II-5. If the outline is used, the following are suggested:

- The purposes of the introduction of the content outline are to present the topics discussed in the module and to impress upon

*The selection of 80 percent as a passing criterion is arbitrary and can be modified.

the students the need to understand medical terminology. The latter concept can be emphasized by placing on the chalkboard some medical terms that are potentially unfamiliar to the students; then ask for definitions.

- In Section 1.1 of the content outline, present some common prefixes and suffixes (those related to the terms presented above) and again ask the students to define the terms on the board. This exercise should demonstrate to the students that medical terminology is not confusing if they understand some common prefixes and suffixes. After this exercise, distribute Handout 1, "Prefixes and Suffixes," and let the students have some time to study the handout. After such time, you may want to orally examine the students' ability to recognize prefixes and suffixes. Suffixes or prefixes may be added to the list.
- Section 1.2 is designed to teach the students how to use medical dictionaries. It is suggested that the instructor provide the students with a list of words to look up. This list of words should include those that the course coordinator feels are most important.
- Section 1.3 is designed to let the students know why they should use and understand medical terminology.

NOTES

Equipment and Materials

Equipment—Educational

Chalkboard and chalk
Medical dictionary
Text on medical terminology

Equipment—Medical

None

Materials

Behavioral objectives
Handout 1: "Prefixes and Suffixes"
Handout 2: Medical Terminology (list of words developed by the instructor or course coordinator)
Text

Content Outline

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Introduction

- In this module, we are going to discuss:
  - — Human systems
    - a. Anatomy
    - b. Physiology
  - — Patient assessment—identification of problems
- In other modules, as well as this one, we will use medical terminology, such as (write on chalkboard):
  - — Dyspnea
  - — Cardiology
  - — Neurology
  - — Posterior
  - — Apnea

1.1. Prefixes and suffixes

A. Discuss prefixes (beginnings of words).
   1. Dys = disordered, painful, difficult
   2. Cardio = heart
   3. Neuro = nerve
   4. Post = after, back
   5. A = absence of

   (Underline prefixes of words on the chalkboard and ask the students if they can define the words.)

B. Discuss suffixes (ends of words).
   1. -pnea = breathing
      a. dyspnea (difficulty in breathing)
      b. apnea (absence of breathing)
   2. -ology = science of
      a. cardio-ology (science of heart)
      b. neuro-ology (science of nerves)

C. Point out that if basic prefixes and suffixes are known, medical terminology becomes less difficult. (Hand out a list of prefixes and suffixes—instruct the students to learn them for their own benefit.) Give the students 5 minutes to look over the list. After that time you might want to orally test their abilities.)

D. Discuss roots.

1.2. Medical dictionary (show to the class)

A. Look up selected words and discuss:
   1. Pronunciation
   2. Spelling
   3. Definition
   4. Subtopics
   5. Medical synonyms
   6. Word variation
   7. Capital letters

B. Discuss contents and use of the appendix.
   1. Glossary
   2. Signs and symbols

1.3. Medical terminology

A. Needed to understand what is said in class
B. Needed to communicate with:
   1. Doctors
   2. Nurses
   3. Other emergency medical technicians (EMT's)
C. Used in international language

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Handout 1: Prefixes and Suffixes (to be inserted in the student *Workbook*)

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Prefixes

A- or An-	absence of	Entero-	intestine
Ambi-	both	Erythro-	red
Angio-	seed, vessel	Gastro-	stomach
Ante-	before	Glyco-	sugar
Anti-	against	Hemato-, Hem-, Hema-	blood
Arthro-	joint	Hemi-	half
Bi-	two	Hepa-	liver
Brady-	slow	Hydro-	water
Cardio-	heart	Hyper-	above, excessive
Cephalo-	head	Hypo-	below, deficient
Cerebro-	brain	Hystero-	uterus
Cholo-	bile	In-	in
Circum-	around	Leuco-	white
Contra-	against, opposed	Macro-	large
Cranio-	skull	Mal-	disordered, bad
Cyst-	sac	Mamm-	breast
Derma-	skin		
Dys-	difficult, painful		
En-	in		

Micro-	small
Mye-	muscle
Nephro-	kidney
Neuro-	nerve
Oto-	ear
Para-	beside
Pneumo-	air or lung
Poly-	many
Post-	after
Pre-	before
Pseud-	false
Pulmon-	lung
Pyel-	pelvis or kidney
Pyo-	pus
Retro-	backward, behind
Rhino-	nose
Semi-	half
Sub-	under
Super-, Supra	above, greater
Tachy-	fast
Topo-	surface
Trans-	across

Suffixes

-algia	pain
-asthenia	weakness
-cyte	cell
-ectomy	surgical removal
-emia	blood
-esthesia	feeling, sensation
-genic	causing
-graph(y)	visualization, machine
-itis	inflammation
-metry	measurement
-ology	science of
-oma	tumor
-osis	disease, caused by
-ostomy	forming or opening

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-otomy	cutting into
-paresis	weakness
-pathy	disease
-phobia	fear
-plegia	paralysis
-pnea	breathing
-ptosis	falling
-scopy	see
-uria	urine

NOTES

UNIT 2

emt-p

HUMAN SYSTEMS (ANATOMY AND PHYSIOLOGY)

NOTES

Knowledge Objectives

After completing this module, the student should be able to correctly respond to at least 80 percent* of the objectives listed below.

For those objectives involving recognition, the student will be required to recognize the specific term, definition, or procedural step(s) from a group of terms, definitions, or procedural steps presented to him. Recall involves the student expressing the term, definition, or procedural step(s) either orally or in writing, without the presence of any clues.

Many of the terms introduced in Module II will be included in later modules. The purpose of the introduction of the terms in this module is to begin to familiarize the student with the vocabulary. The recognition or recall of many of the terms is not an objective of this module. These terms will become part of the objectives in the modules covering the specific content to which the terms are important.

2.1.1.K Given descriptions of the following terms:

- Anatomy
- Physiology
- Biochemistry
- Biophysics

*The selection of 80 percent as a passing criterion is arbitrary and can be modified.

the student should be able to recognize the terms associated with each description from a list of labels.

2.3.1.K Given a list of statements, the student should be able to select the statement(s) that is (are) true about cells. The statements will concern basic principles of cell function, cell specialization, and cell structure.

2.3.2.K Given descriptions of the following terms:

- Protein
- Carbohydrate
- Lipid
- Nucleic acid
- DNA
- RNA
- Metabolism

the student should be able to recognize the label associated with each description from a list of labels.

2.4.1.K Given descriptions of each of the following anatomic terms:

- Anterior
- Posterior
- Ventral
- Dorsal
- Superior
- Inferior
- Superficial
- Deep
- Internal
- External
- Proximal
- Distal
- Medial
- Lateral
- Head
- Neck
- Trunk
- Thorax
- Abdomen
- Extremities
- Prone
- Supine

the student should be able to recall and write the name associated with each description.

2.4.2.K Given descriptions of each of the following anatomic terms:

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- Craniad
- Cephalad
- Mesiad
- Caudad
- Laterad
- Sagittal
- Midsagittal
- Transverse
- Coronal

the student should be able to recognize the label associated with each description from a list of labels.

2.5.1.K Given a list of statements, the student should be able to select those statements that are true about the function of epithelial and connective tissue.

2.6.1.K Given a set of pictures or illustrations of bones, the student should be able to classify the shape of the bone as either long, short, flat, or irregular.

2.6.2.K Given a list of labels, the student should be able to select the label(s) associated with the various structural components of bones.

2.6.3.K Given a list of labels, the student should be able to identify the composition of bone.

2.6.4.K Given a list of labels, the student should be able to identify the major bones comprising the human skeleton.

2.6.5.K Given a list of labels, the student should be able to identify the various types of joint articulations.

2.6.6.K Given a list of labels, the student should be able to identify the various types of joint movements.

2.7.1.K Given a list of labels, the student should be able to identify the classification, major groupings, and functions of muscles.

2.8.1.K Given a list of structures, the student should be able to select those structures associated with the respiratory

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system, for example,

- Trachea
- Larynx
- Bronchi
- Alveoli
- Pleural sac

2.8.2.K Given a list of functions, the student should be able to describe those functions associated with the respiratory system.

2.9.1.K Given a list of labels, the student should be able to select those labels associated with the digestive system, for example,

- Pancreas
- Gallbladder
- Colon
- Small intestine

2.9.2.K Given a list of digestive system structures, the student should be able to describe the function of the structures.

2.10.1.K Given a list of labels, the student should be able to select those labels associated with the structure of the circulatory system.

2.10.2.K Given a list of labels, the student should be able to select those labels associated with the structure of the lymphatic system.

2.11.1.K Given a list of renal system structures, the student should be able to locate and describe the function of each structure.

2.12.1.K Given a list of labels or phrases describing subsystems, the student should be able to select those subsystems associated with the nervous system and describe their functions.

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2.13.1.K Given a list of labels, the student should be able to select those labels associated with the female and male reproductive structures.

2.14.1.K Given a list of labels, the student should be able to select those labels associated with the endocrine system.

2.15.1.K Given a list of functions performed by the following systems, subsystems, or organs of the body:

- Muscles
- Skeleton
- Joints
- Respiratory system
- Alveoli
- Lymphatic system
- Brain
- Spinal cord
- Autonomic nervous system
- Renal system
- Liver
- Digestive system
- Peripheral nervous system
- Endocrine system

the student should be able to recognize and associate the label for each system, subsystem, or organ with the appropriate function.

Instructor Activities

Assign the material referred to below during the class period immediately before beginning this unit:

- Chapter 2, Unit 2, of the *Text*
- Knowledge objectives for this unit

Alternative or suggested reading:

- *The Wonderful Human Machine*. Chicago: American Medical Association, 1971.
- Ruth L. Memmler. *The Human Body in Health and Disease*. 3d ed. Text and workbook. Philadelphia: J.B. Lippincott Company, 1970.

Prepare a written test using the knowledge objectives listed in this unit.

Prepare a lecture following the content outline of page II-17. To assist you, the following suggestions are made:

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- At the beginning of the unit, inform the students that there will be (1) no demonstration sessions and (2) no practice sessions.
- Review the available audiovisual materials appropriate for this unit. The following items may be helpful:

— Materials
  a. Manikin
  b. Skeleton
  c. Beef muscle tissue
  d. Chicken cartilage
  e. Beef bone, cut vertically
  f. Beef joint
  g. Beef heart
— Anatomic charts
  a. Overall body structure
  b. Skeletal system
  c. Muscular system
  d. Nervous system
  e. Digestive system
  f. Circulatory system
  g. Respiratory system

- When presenting anatomy, instruct the students to select a partner and to locate and palpate the anatomical parts as discussed—for example, the humerous and associated muscle groups, the location of internal organs.
- Remember that the content outline is organized to present an overview of the various human systems. If a more extensive presentation of anatomy and physiology is preferred, the instructor is directed to expand the outline to the desired level. If the content is expanded, the knowledge objectives should reflect this modification.

Conduct an evaluation after the lecture and after the students have had time to study.

Equipment and Materials

Equipment—Educational

Chalkboard and chalk
Anatomic charts (if available):
- Body structure (overall)
- Skeletal system
- Muscular system
- Nervous system
- Digestive system
- Circulatory system
- Respiratory system

Equipment and Materials—Medical

Manikin
Skeleton (if available)
Beef muscles (if available)
Chicken cartilage (if available)
Beef bone, cut vertically (if available)
Beef joint (if available)
Beef heart (if available)

Materials

Knowledge objectives (optional)
Written test
Text

Content Outline

2.1. Study of human systems (introduction)

A. Anatomy—the form of living systems
B. Physiology—the function of living systems
C. Biochemistry—the chemistry of living systems
D. Biophysics—the study of the physical methods of living systems

NOTES

2.2. The balance of the systems

A. Human systems are in balance—homeostasis.
B. The internal environment must be in a near constant state.
   1. Temperature
   2. Oxygen supply
   3. Carbon dioxide level
   4. Nutrient supply
   5. Inorganic—ion concentration
C. Systems in the body contribute to this balance.
D. The regulatory process starts when an imbalance is present.

2.3. Basic unit of life—the cell

A. The principles of cells are essentially the same.
   1. Exchanging materials with immediate environment
   2. Obtaining energy from nutrients
   3. Synthesizing proteins
   4. Reproduction
B. Differences in cells are due to specialization.
C. Molecules are the basic structure of cells.
   1. Water (approximately 80 percent)
   2. Inorganic electrolytes
   3. Organic molecules (compounds of carbon)
      a. Proteins
      b. Lipids
      c. Carbohydrates
      d. Nucleic acids
         (1) DNA
         (2) RNA
D. Food is converted to energy.
   1. Protein is transformed into simple amino acids in the digestive system.
   2. Carbohydrates and fats are similarly broken down.
   3. They are absorbed into the blood stream.
   4. They penetrate the cell membranes.
   5. Metabolism is the chemical reaction that changes nutrients into energy.

2.4. Anatomic terminology

(Use a volunteer student, manikin, chart, or other visual aids,

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to point out the following. Also try to point out prefixes and suffixes of the terms as they are discussed.)

A. Body surface
   1. Quadrants
   2. Areas

B. Location
   1. Anterior—toward the front of the body
   2. Ventral—toward the anterior side
   3. Posterior—toward the back of the body
   4. Dorsal—toward the posterior side
   5. Medial—toward the center plane (heart)
   6. Lateral—away from the medial plane
   7. Superior—upper
   8. Inferior—lower
   9. Superficial—near the surface
   10. Deep—remote from the surface
   11. Internal—inside
   12. External—outside
   13. Proximal—point nearest (to any part of reference)
   14. Distal—point farthest (from any part of reference)

C. Direction
   1. Craniad—toward the cranium
   2. Caudad—toward the tail end
   3. Mesiad—toward the midline
   4. Cephalad—toward the head
   5. Laterad—toward the side away from the midline

D. Sections
   1. Sagittal—a vertical line dividing left from right
   2. Midsagittal—a section dividing the body into equal right and left sections
   3. Transverse or cross—a horizontal cut dividing the body into upper and lower portions
   4. Coronal—a vertical cut dividing the body into anterior and posterior portions

E. Regions
   1. Head
   2. Neck
   3. Trunk
      a. Thorax
      b. Abdomen
   4. Extremities

NOTES

F. Positions

1. Supine—a horizontal position of the body lying flat on the back—no rotation
2. Prone—a horizontal position of the body lying face down—no rotation

2.5. Tissue

A. Epithelial

1. Location
2. Functions
   a. Protection
   b. Secretion
   c. Excretion
   d. Absorption

B. Connective

1. Types
   a. Loose connective
   b. Hematopoietic
   c. Strong supportive
2. Location
3. Function

2.6. The body structure—the skeleton

A. Bones

1. Classification—by shape, for example, long, short, flat, or irregular
2. Structure of bones
   a. Diaphysis—the shaft of a long bone
   b. Epiphysis—the end of a long bone
   c. Periosteum—connective tissue around the bone
   d. Endosteum—connective tissue lining the medullary cavity
   e. Medullary—relating to the marrow (medulla—the marrow)
   f. Marrow—connective tissue inside the bone
3. Composition of bones
   a. Water
   b. Inorganic minerals
   c. Organic compounds

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4. Bones of the skeleton—206 bones
    a. Axial skeleton—80 bones
        (1) Skull—29 bones
        (2) Vertebral column—26 bones
        (3) Thorax—25 bones
            (a) Sternum—1 bone
            (b) Ribs—24 bones
    b. Appendicular skeleton—126 bones
        (1) Upper extremities—64 bones
            (a) Pectoral girdle—4 bones
            (b) Arms and hands—60 bones
        (2) Lower extremities—62 bones
            (a) Pelvic girdle—2 bones
            (b) Legs and feet—60 bones

B. Articulations—joints
    1. Types of articulations (describe each)
        a. Gliding—arthrodia
        b. Hinge—ginglymus
        c. Ball and socket—enarthrosis
        d. Pivot—trochoid
        e. Ellipsoidal—condylar
        f. Saddle
    2. Types of movement (describe each)
        a. Flexion—extension
        b. Abduction—adduction
        c. Pronation—supination
        d. Rotation
        e. Circumduction

2.7. The moving force—muscles

A. Classification (give examples)
    1. Voluntary muscles
    2. Involuntary muscles
    3. Cardiac
    4. Tendons
    5. Ligaments
B. Major groups
    1. Voluntary (give examples)
        a. Sternocleidomastoid
        b. Pectoralis

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c. Gluteal
d. Biceps
e. Triceps

2. Involuntary (give examples)
a. Diaphragm (also voluntary)
b. Esophageal
c. Stomach
d. Sphincters (also voluntary)

C. Function (describe)
1. Movement
a. Contraction
b. Extension
2. How muscles function
a. Point out that they convert glucose to energy.
b. Point out that heat and lactic acid are byproducts.
c. Discuss the need for oxygen.

2.8. The basis for fuel consumption—respiratory system

A. Structure (describe locations and purposes)
1. Nose
2. Turbinates
3. Sinus
4. Mouth
5. Epiglottis
6. Trachea
7. Larynx
8. Lung
9. Bronchi
10. Alveoli
11. Pleural sac

B. Function
1. Air is inspired to the lungs.
2. Oxygen attaches to hemoglobin.
3. Blood carries hemoglobin to the cells.
4. The cells use oxygen to burn glucose for energy.
5. Carbon dioxide is released.
6. Carbon dioxide is carried in the blood back to the lungs.
7. The lungs expire.
8. The controlling mechanism is PCO_2—about 400

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mmHg (conventional millimeters of mercury). (Describe process.)

C. Normal state
   1. Respiration—average of 18 per minute
   2. Four- to six-minute (average) supply of oxygen in the system after breathing has stopped due to injury or disease

2.9. The input system—digestive system

A. Structure (describe the locations and purposes)
   1. Mouth (teeth)
   2. Salivary glands
   3. Pharynx
   4. Esophagus
   5. Stomach
   6. Liver
   7. Pancreas
   8. Gallbladder
   9. Small intestine
   10. Colon (large intestine)

B. Function
   1. Food is the input.
   2. Proteins, carbohydrates, and fats are broken down to simple compounds.
   3. Compounds are absorbed by villi into the blood stream and lymphatic system.
   4. Waste products are excreted.

2.10. Distribution—circulatory system

A. Structure (describe the locations and purposes)
   1. Heart
      a. Atria
      b. Ventricles
   2. Arteries
      a. Pulmonary
      b. Aorta
      c. Arterioles
      d. Capillaries

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3. Veins
    a. Pulmonary
    b. Venae cavae
    c. Venules
4. Blood
    a. Red cells
    b. White cells
    c. Platelets
    d. Plasma

B. Function
1. Obtains oxygen
    a. Blood passes from the right atrium to the right ventricle.
    b. The right ventricle pumps blood to the lungs through the pulmonary arteries
    c. Oxygenated blood goes from the lungs through the pulmonary vein to the left atrium.
    d. From the left atrium the blood passes to the left ventricle.
2. Distributes oxygen and nutrients
    a. Point out that the process is from the left ventricle to the aorta.
    b. Point out that nutrients are metabolized in the liver and other organs.
    c. Point out that the process is from the arteries to the arterioles to the capillaries.
    d. Point out that cells burn nutrients and oxygen.
    e. Point out that capillaries pick up waste products including carbon dioxide.
    f. Point out that the flow is to the venules and then to the venae cavae.
    g. Point out that the kidneys remove waste products from the blood stream.
    h. Point out that muscles move blood inferior to the heart with the help of valves.

C. Systemic blood circuits
1. Coronary
2. Upper extremities
3. Neck and head
4. Thorax

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5. Digestive
6. Pelvis and lower extremities
7. Renal

D. Lymphatic system
   1. Structure (describe locations and purposes)
      a. Conduction of lymph
         (1) Capillaries
         (2) Vessels
         (3) Ducts
      b. Special function tissues
         (1) Nodes
         (2) Spleen
         (3) Tonsils
         (4) Thymus
   2. Function
      a. Tissue fluid is filtered out of blood capillaries.
      b. Fluid (lymph) is returned to the blood stream by the lymphatic system.
      c. Flow is maintained by:
         (1) Pressure difference in the system
         (2) Formation of lymph
         (3) Intestinal movements
         (4) Muscles in lymph vessels
         (5) Muscle activity
         (6) Respiration
      d. Special function tissue adds lymphocytes and antibodies to the system.

2.11. Renal system

A. Structures (describe location and function)
   1. Kidneys
   2. Ureter
   3. Bladder
   4. Urethra

B. Function
   1. Controls production and elimination of urine
   2. Eliminates toxic substances and waste products
   3. Maintains salt and water balance
   4. Maintains acid-base balance

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2.12. The control system—nervous system

A. Structure (describe the locations and purposes)
   1. Central nervous system
      a. Brain
      b. Spinal cord
   2. Peripheral nervous system
   3. Autonomic nervous system

B. Function
   1. Brain
      a. Regulatory center
      b. Seat of consciousness
      c. Seat of sensations
      d. Source of voluntary acts
      e. Seat of emotion
      f. Seat of higher mental processes
      g. Seat of complex reflex center
   2. Spinal cord
      a. Conducting pathway
      b. Simple reflex center
   3. Peripheral nervous system
      a. Transmits messages from various parts of the body to the brain
      b. Composed of afferent fibers—impulses to the brain
      c. Composed of efferent fibers—impulses from the brain
   4. Autonomic nervous system
      a. Regulates activities of the visceral organs
      b. Balances the body system
   5. Parasympathetic
      a. In action when the body is at rest
      b. Generally specific
   6. Sympathetic
      a. In action when the body is in action
      b. Widespread effect

2.13. Reproductive system

A. Structure (describe the locations and functions)
   1. Female
      a. Ovaries

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b. Fallopian tubes
c. Uterus
d. Vagina
e. External genitalia

2. Male
a. Testes
b. Duct system
c. Accessory glands—prostate
d. Urethra

B. Function: reproduction of the species

2.14. Remote control—the endocrine system

A. Structure (describe the locations and purposes)
1. Pituitary
2. Thyroid gland
3. Parathyroid gland
4. Adrenal glands
5. Pancreas
6. Ovaries
7. Testes

B. Function: control of body activities through the secretion of hormones

2.15. Summary (briefly review)

A. Cells
B. Skeleton (function)
1. Bones
2. Joints

C. Muscles (function)
D. Digestive system (function)
E. Circulatory system (function)
1. Pulmonary circuit
2. Systemic circuit
3. Lymphatic system

F. Renal system
G. Nervous system (function)
H. Reproductive system
I. Endocrine system

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UNIT 3 emt-p

PATIENT ASSESSMENT

Knowledge Objectives

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After completing this module, the student should be able to correctly respond to at least 80 percent* of the following:

3.1.1.K Given a list of reasons, the student should be able to select the reason(s) why a primary survey is conducted.

3.1.2.K Upon request, the student should be able to recall (from memory) and list the steps involved in the primary assessment of a communicative patient and a noncommunicative patient. To complete the objective, the student must list those steps involved in the primary assessment of the noncommunicative patient in correct sequence.

3.1.3.K Given a list of reasons, the student should be able to select the reason for performing a secondary assessment.

3.1.4.K The student should be able to recall the four components of a secondary assessment.

3.1.5.K Given a description of a patient indicating whether the patient (1) can communicate and (2) has a suspected medical or trauma-related problem, the student should be able to rank, in the order of their importance, the four pertinent components of a secondary assessment.

*The selection of 80 percent as a passing criterion is arbitrary and can be modified.

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3.1.6.K Given a description of a patient indicating whether the patient (1) can communicate and (2) has a suspected medical or trauma-related problem, the student should be able to select the components of the secondary patient assessment that will be emphasized based on the patient's problem.

3.2.1.K Given the following phrases:

- Immediate history of the patient
- Past medical history of the patient
- Family medical history

the student should be able to recall and list the components that are included in each of the above for medically-related or trauma-related problems.

3.2.2.K Given a written description of a patient's history including the immediate history, past medical history, and family history, with information deleted, the student should be able to supply the missing information. In any given written description, no more than three pieces of information will be deleted.

3.2.3.K The student should be able to recall and list in writing four sources of information that are available to an EMT at the scene.

3.3.1.K Given a situation that calls for the examination of a patient with a suspected trauma-related problem, the student should be able to recall the signs that should be sought when examining the following:

- Head
- Neck
- Thorax
- Abdomen
- Extremities

3.4.1.K Given a list containing general categories of things to look for when getting diagnostic and vital signs, the student should be able to list the specific items under each category,

for example, given respiration, the student should be able to list, at a minimum:

- Rate
- Depth
- Flaring of nares
- Rectus abdominis breathing
- Retraction of intercostal space
- Breath sounds

3.5.1.K Given a situation that calls for the examination of a patient with a suspected medical problem, the student should be able to recall the signs to be sought when examining the:

- Neck
- Thorax
- Abdomen
- Extremities

3.6.1.K Given a situation describing a patient with a possible illness or injury who may or may not be able to communicate, the student should be able to describe the procedure for evaluating the patient described. Minimally, the student should include the appropriate primary assessment and specify the order of the four components of the secondary assessment and the areas of the assessment that would be emphasized.

3.7.1.K The student should be able to recall the eight components of a patient's history that should be included when communicating information to the hospital personnel.

3.7.2.K Given a sample case presentation with the information in random order, the student should be able to identify the important information and place the information in the correct order to be communicated to the hospital personnel.

3.8.1.K Given a list of statements, the student should be able to select the one that best describes the purpose of triage.

3.8.2.K Given a list of patients that includes each patient's problem and vital signs, the student should be able to indicate

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whether the patient should be classified as first, second, or third priority.

3.8.3.K Given a list of at least five patients that includes the patients' problems and vital signs, the student should rank the patients in the order they should receive treatment.

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Skill Objectives

After completing the module, the student should be able to correctly perform each of the skill objectives. "Correctly" will be defined by the instructor during the lecture and demonstration sessions. Skill evaluation sheets are included in this module.

3.1.1.S Given a fellow student posing as a patient, the student should be able to demonstrate, in proper sequence, the procedure for conducting a primary assessment for:

- A communicative patient
- A noncommunicative patient

3.2.1.S Given a student posing as a conscious, communicative patient with an injury or illness, the student should be able to demonstrate the procedure for obtaining the patient's case history. The history will include:

- Immediate history
- Past history
- Family history

The information required for each segment will be specified by the instructor during the lecture.

3.3.1.S Given a student posing as a patient with a suspected trauma-related problem, the student should be able to demonstrate the correct procedure for conducting the necessary patient assessment. The student should include, as part of the demonstration, examination of the head, neck, thorax, abdomen, and extremities.

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3.4.1.S Given a stethoscope, sphygmomanometer, pen light, and a student posing as a patient, the student should be able to demonstrate the correct procedure and technique for taking diagnostic and vital signs. The specific activities to be demonstrated are assessment of the following:

- Pupillary reaction to light
- Respirations
- Pulse
- Skin (texture and temperature)
- Blood pressure

3.5.1.S Given a stethoscope and a student posing as a patient, the student should be able to demonstrate the procedure for conducting a patient assessment with a person suspected of a medical problem. The student should include as part of the demonstration, auscultation of the lung, heart, and abdominal sounds.

3.6.1.S Given a student posing as a communicative patient, the student should be able to demonstrate the procedure for conducting a patient assessment when the patient is suspected of having the following:

- Medical problem
- Trauma-related problem

3.6.2.S Given a student posing as a noncommunicative patient, the student should be able to demonstrate the procedure for conducting a patient assessment when the patient is suspected of having the following:

- Medical problem
- Trauma-related problem

NOTE: Objectives 3.6.1.S and 3.6.2.S are terminal objectives and include all the skills listed in Objectives 3.1.1.S through 3.5.1.S. Therefore, the demonstrations and practice sessions are organized to present all objectives individually, but the skill evaluation sheets provided are for the Terminal Objectives 3.6.1.S and 3.6.2.S.

Instructor Activities

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Assign the material referred to below during the class period immediately before the beginning of this unit:

- Chapter 2, Unit 3, of the *Text*.
- Skill and knowledge objectives for this unit.

Prepare a written test using the knowledge objectives listed in this unit.

Prepare a lecture using the content outline on page II-36. To assist you in preparing and conducting the lecture, the following are suggested:

- Inform the students that this unit involves five demonstration sessions:

  3.1.1.S Primary Assessment
  3.3.1.S Secondary Assessment of the Head for Traumatic Injury
  3.3.2.S Secondary Assessment of the Body and Extremities for Traumatic Injury
  3.4.1.S Assessment of Diagnostic and Vital Signs
  3.5.1.S Secondary Assessment for Suspected Medical Problems

- Inform the students that the unit involves four practice sessions:

  — Primary assessment
  — Assessment of diagnostic and vital signs; secondary assessment of thorax and abdomen for suspected medical problems
  — Secondary assessment (head, body, and extremities) for traumatic injury
  — Simulation exercises in:
    a. Taking patient histories
    b. Primary assessment
    c. Secondary assessment

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- Inform the students at the end of this unit that they will be tested on their attainment of both the knowledge and skill objectives contained in this unit.

- Read the demonstration and practice session outlines before conducting the unit lecture. It should be noted that the skill evaluation format differs from that of the demonstrations and practice sessions. The skill evaluations require the students to combine the procedures discussed in the demonstrations and practiced during the practice sessions. For this reason, it might be beneficial if after Practice Session 3 the students be given an opportunity to practice the skills as they are listed on the skill evaluation sheets.

  It should be further noted that Practice Session 4 is a simulation exercise; before implementing this particular practice session, it is recommended that the instructor read the instructions attached to it. Note: This practice session is designed only to assist the students in acquiring the skills and learning to recognize problems and recommended treatments.

- During the lecture, present the status of a normal patient for all aspects of the assessment; for example, normal vital signs, skin color, etc.
- When presenting Section 3.2 of the suggested content outline, note that each segment of the secondary assessment involves some anatomy. When discussing the anatomy, it is suggested that the students not be held responsible for remembering the location of specific components (understanding will be facilitated in future modules).
- When presenting Section 3.7 of the suggested content outline, demonstrate the correct procedure for transferring information to the hospital personnel.
- When presenting Section 3.8 of the suggested content outline, present situations describing triage and the screening of patients.

Administer a written test covering the knowledge objectives in this unit. This test should be given after the students have had an opportunity to study the material.

Conduct the skill evaluations using the provided skill evaluation sheets after the students have had an opportunity to practice.

Equipment and Materials

Equipment—Educational

Chalkboard and chalk

Equipment—Medical

Pen light (one for each student)
Stethoscope (one for each student)
Sphygmomanometer (one for every two students)

Materials

Knowledge objectives (optional)
Skill objectives (optional)
Text
Written test (to be prepared by instructor)
Skill evaluation sheets
Demonstration outlines (five)
Practice session descriptions (four)
Optional: anatomic charts—

Bones
Head
Eye
Ear
Abdomen
Thorax

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Content Outline

Introduction

- Review the skill and knowledge objectives.
- Review the topics.
  - — Discuss the purpose of patient assessment.
    a. Primary assessment
    b. Secondary assessment

— Discuss the components of patient assessment.
  a. Patient's history
  b. Evaluation of diagnostic signs
  c. Examination for suspected medical problem
  d. Examination for suspected trauma-related problem
— Review patient assessment procedure.

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3.1. Patient assessment

A. Procedure for basic history-taking and physical examination
  1. The emphasis is on procedures.
  2. A step-by-step procedure is necessary to gather all information.
  3. The temptation is to jump to a conclusion before gathering all information.

B. Need for gaining the patient's confidence
  1. The EMT is viewed as an extension of the hospital by the patient and family.
  2. The patient's view is colored by:
    a. His physical condition—for example, pain, dyspnea
    b. Fear of the unknown
    c. The patient's conception of what should be done
    d. Sociocultural or racial prejudices
    e. His reaction to the attitude of an EMT
  3. The family will often react to an EMT in a similar manner.
  4. The responsibility for establishing a good relationship lies with an EMT.
    a. Manner of conduct
    b. What the EMT says and does
    c. Information provided to the patient and family

C. Purpose in an emergency situation (two stages)
  1. Primary assessment
    a. Rapidly identify existing life-threatening situations.
    b. Determine whether an evolving process is under way leading to further life-threatening complications.
  2. Secondary assessment
    a. Evaluate the entire patient to determine if underlying problems are present.

b. Perform after all life-threatening situations are treated.
c. Gather information to communicate to the hospital.

D. Steps in patient assessment
1. Primary assessment—initial inspection as approaching the patient
a. Discuss the need to observe for:
(1) Severe hemorrhage
(2) Gross deformities
(3) General assessment of situations
(4) Obvious mechanisms of injury
b. Discuss the need to perform a primary assessment.
(1) Discuss the procedure.
(a) Establish consciousness.
(b) Establish an airway.
(c) Check for breathing—include inspection for severe chest trauma.
(d) Check the circulation.
(i) Pulse
(ii) Severe hemorrhage
(2) Point out that before establishing an airway, if the mechanism of injury indicates, check for cervical spine injury by inspection and palpation before moving the patient.
(3) Point out that if the patient is alert and communicative, it is only necessary to evaluate for severe chest trauma and hemorrhage.
c. Discuss the need to make an initial determination of whether the problem appears to be medical or trauma-related.
d. Present Demonstration 3.1.1.
e. Present Practice Session 1.
2. Secondary assessment—complete assessment
a. Discuss the four components of secondary assessment.
(1) Development of a patient's history
(2) Evaluation of diagnostic and vital signs
(3) Examination for a medical problem
(4) Examination for a trauma-related problem
(5) Further definitions of each component are

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given in this unit. Give a brief description at this time and give examples.

(a) A patient in an auto accident (apparent trauma) wrecked his car because of a heart attack.

(b) A patient having severe chest pain (medical problem) collapsed and has a hidden scalp laceration.

b. Discuss the necessity of including each component to some degree in any patient assessment—emphasis will vary based on specific situations.

c. Point out that the emphasis will be determined from the evaluation of the patient; specifically:

(1) Patient's ability to communicate

(2) Patient's problem—medical or trauma-related

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3.2. Acquisition of the patient's history

A. Discuss importance.

1. Point out that this history has a direct bearing on:
   a. What an EMT does
   b. The care given to the patient in the hospital
2. Point out that the patient must realize that it is his responsibility to give a complete and accurate history to hospital personnel.

B. Point out that the history is divided into three parts.

1. Discuss the history of the immediate situation.
2. Discuss the patient's past medical history.
3. Discuss family medical history (usually not relevant in the field with trauma patients)
4. Point out that the patient's history begins as soon as an EMT arrives in any situation and continues throughout.
5. Point out that it is obtained from:
   a. Patient
   b. Family
   c. Bystanders
   d. Environmental clues
   e. Observation of the patient

C. Discuss the need to obtain a history of the present illness.
   1. Need for a directed history
      a. Point out that there is a balance between allowing the patient to ramble and leading the patient.
      b. Point out that the purpose is to determine why you were called.
      c. Discuss medical versus trauma-related problems—history and examination procedures differ in emphasis.
   2. Need to gather information (general format)
      a. Gross problem identification
         (1) Chief complaint
         (2) How the patient currently feels
      b. Location of the problem
         (1) Location of pain
         (2) Other symptoms (e.g., dizziness, short of breath)
      c. Quality of symptom(s)
         (1) How the symptom feels
         (2) What the symptom resembles
      d. Quantity of symptom(s)
         (1) Pain intensity
         (2) Effect on normal functioning
      e. Chronology
         (1) Time of the onset
         (2) Duration of symptoms (medical)
         (3) Frequency of symptoms (medical)
      f. Cause of the problem (trauma)
         (1) What occurred
         (2) Any contributing physical cause
         (3) How did the injury take place (e.g., patient's head hit the corner of a table when he fell)?
      g. Scenario of first symptoms (medical)
         (1) Where did the first symptoms occur?
         (2) What was the patient doing?
      h. Aggravating and alleviating factors
         (1) Aggravating events or movements
         (2) Alleviating events or movements
      i. Associated complaints
         (1) Other symptoms

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(2) Effected normal body functions

D. Discuss the need to obtain the patient's medical history.
   1. General health prior to the current problem
   2. Current medical problem
      a. Attending physician, name, address
      b. Medication
      c. Treatments
   3. Recent surgery
      a. Type
      b. When
   4. Injuries
      a. Type
      b. When
   5. Allergies

E. Discuss the need to obtain a family medical history (it is occasionally informative).
   1. Immediate family members' general health
   2. Recent illnesses
      a. Description
      b. Symptoms

F. Point out that it is not necessary to collect information in the exact order presented, but as much information as is available should be collected and recorded.

G. Review the information required.

3.3. Examination for trauma-related problems

A. Sequence of examining for trauma-related problems
   1. If it appears to be a trauma-related problem, perform before the evaluation of diagnostic signs and medical problems.
   2. If it appears to be a medical problem, perform only after the evaluation of diagnostic signs and medical problems—if the patient can communicate, it may only be necessary to ask a question.

B. Components—define each one.
   1. Inspection
   2. Auscultation
   3. Palpation
   4. Percussion

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C. Procedure for assessment—steps involved by area—describe the procedure for each area.

1. Head
   a. Inspection
      (1) Obvious hemorrhage
      (2) Ecchymosis, erythema, contusions
      (3) Scalp lesions
   b. Palpation
      (1) Lumps
      (2) Depressions
      (3) Pain on compression of skull—if the patient is communicative

2. Eye
   a. Inspection
      (1) Lacerations to the lid or globe
      (2) Foreign matter in the eye
      (3) Anisocoria
      (4) Eye movements
      (5) Pupillary reaction
   b. Palpation
      (1) Swelling in the orbital or periorbital area
      (2) Failure to sense touch in the supra- and infra-orbital areas—if the patient is communicative

3. Ear—inspect for:
   a. Discharge from the external auditory canal
   b. Ecchymosis over the mastoid (Battle's sign)
   c. Lacerations
   d. Bleeding

4. Nose—inspect for:
   a. Presence of rhinorrhea
   b. Patent nostrils
   c. Bleeding from the nose
   d. Flaring of the anterior nares on inspiration

5. Mouth
   a. Inspection
      (1) Potential obstructed airway
      (2) Edema or hematoma
      (3) Bleeding
      (4) Teeth or dentures lodged in the pharynx

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(5) Check alignment of the teeth
(6) Pain when the patient bites the teeth together

b. Palpation for fractures of:
(1) Zygomatic bones
(2) Mandible
(3) Maxilla

6. Demonstration 3.3.1.S

7. Neck
a. Inspection
(1) Retraction at the suprasternal notch on inspiration; tracheal deviation
(2) Deviation of the trachea from the midline

b. Palpation
(1) Cervical spine
(2) Chondro costal compression
(3) Kernig's sign
(4) Pain on extension or flexion

c. Auscultation—air sounds in the trachea

8. Skin
a. Jaundice
b. Cyanosis
c. Diaphoresis
d. Temperature
e. Clammy
f. Pallor

9. Thorax
a. Inspection
(1) Respiration
(a) Rate—tachypnea
(b) Depth
(i) Hyperpnea
(ii) Hypopnea
(c) Retraction of intercostal space between the ribs
(2) Chest elevation symmetry—flail chest
(3) Lacerations, punctures, or ecchymosis

b. Palpation
(1) Palpate the vertebrae and ribs for symmetry, tenderness

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(2) Anterior to posterior compression of the thorax
(3) Lateral-to-lateral compression of the thorax
(4) Compression of the clavicle
(5) Cranial to chordal compression
(6) Pressure of the costochondral junction
(7) Compression on the costovertebral angles

c. Auscultation—limited to hear only a small percentage of the lung volume and heart sounds.
(1) Lung sounds
(a) Absent or unequal breath sounds
(b) Characteristics of:
(i) Rales
(ii) Rhonchi
(iii) Wheezes
(iv) Stridor
(2) Heart sounds

d. Percussion
(1) Presence of fluid in the thorax
(2) Presence of pneumothorax in a collapsed lung

10. Abdomen
a. Inspection
(1) Lacerations, ecchymosis, burns, etcetera
(2) Hematoma
(3) Flexion of the hips to relieve pain

b. Auscultation—bowel sounds

c. Palpation (must be done firmly)
(1) Distended abdomen
(2) Guarding
(3) Local tenderness
(4) Rebound pain

11. Extremities
a. Inspection
(1) Abnormal angulation—bone ends protruding
(2) Extremity pulse present
(a) Dorsalis pedis
(b) Radial
(3) Nail bed color (cyanosis)
(4) Impaired sensation
(5) Inability to move joint

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(6) Lacerations, ecchymosis
(7) Needle marks, bites
b. Palpation—stress for abnormal reaction
12. Central nervous system
a. Inspection
(1) Mental state
(a) Consciousness
(b) Orientation
(c) Responsiveness—describe what the patient can do, that is, his response to verbal stimulus and pain.
(2) Gross deformities
(3) Lacerations
(4) Decerebrate posturing
(5) Decorticate posturing
b. Palpation
(1) Tenderness
(2) Deformities
(3) Sensation and muscle strength
13. Demonstration 3.3.2.S
14. Practice Session 2

NOTES

3.4. Evaluation of diagnostic signs

A. Sequence of taking signs
1. If the patient is communicative with a traumatic injury, take the signs after assessing the site(s) of the injuries.
2. If the patient is communicative with a medical problem, take the signs after primary assessment and in conjunction with taking the medical history, if possible.
3. If the patient is noncommunicative, take the signs immediately after the primary assessment.

B. Diagnostic and vital signs
1. Mental status
a. Consciousness—avoid descriptive words like "stupor," be specific.
b. Reaction to stimulus—describe
c. Orientation
d. Responsiveness

2. Respirations
   a. Tracheal deviation
   b. Rate—tachypnea
   c. Depth
      (1) Hyperpnea
      (2) Hypopnea
   d. Dyspnea
   e. Breathing sounds
   f. Flaring of the anterior nares on inspiration
   g. Retraction of the suprasternal notch on inspiration
   h. Retraction of intercostal spaces
3. Pulse
   a. Rate
   b. Rhythm
   c. Strength
4. Blood pressure
   a. Sphygmomanometer
   b. Readings by auscultation (palpate only if necessary)
      (1) Systolic
      (2) Diastolic

C. Demonstration 3.4.1.S

3.5. Secondary assessment—examination for a suspected medical problem

A. The sequence of examining for a suspected medical problem
   1. If it appears to be a medical problem, perform after taking the diagnostic and vital signs.
   2. If it appears to be a trauma-related problem, perform after the examination for a trauma-related problem.
   3. In those instances where the patient has a trauma-related problem, the survey for a medical problem may simply be asking a question.

B. Components—review each.
   1. Inspection
   2. Auscultation
   3. Palpation
   4. Percussion—of limited value in a field situation

C. The steps involved.
   1. Procedure for medical problems: emphasis is placed

NOTES

on the particular area suspected (i.e., lungs, heart, central nervous system)

2. Procedures for the neck
   a. Inspection—jugular vein distention
   b. Auscultation of trachea for adequate air flow
3. Procedures for the thorax—lungs
   a. Inspection—respiration
   b. Auscultation
      (1) Rales
      (2) Rhonchi
      (3) Wheezes
      (4) Stridor
   c. Palpation—symmetry of breathing
   d. Percussion
      (1) Hemothorax
      (2) Pneumothorax
4. Procedures for the thorax—heart: auscultation for abnormal heart sounds
5. Procedures for the abdomen
   a. Inspection
      (1) Flexion of the hips to relieve pain
      (2) Normal contour during breathing
      (3) Distention
   b. Auscultation
      (1) Point out that the EMT should auscultate for bowel sounds.
      (2) Point out that increased bowel contractions are a characteristic sound.
   c. Palpation
      (1) Distention
      (2) Guarding
      (3) Local tenderness
      (4) Rebound pain
6. Procedures for the central nervous system
   a. Inspection
      (1) Mental state
      (2) Pupil reaction
      (3) Eye movements
      (4) Muscle tone
      (5) Paralysis

NOTES

b. Palpation
   (1) Loss of feeling
   (2) Reflex absent
   (3) Muscle tone
   (4) Paralysis
7. Demonstration 3.5.1.S
8. Practice Session 3

3.6. Four components of assessment (order)

A. If the patient can communicate, determine if he has a medical or trauma-related problem.
   1. If a medical problem, the general order should be:
      a. Evaluate the diagnostic and vital signs.
      b. Develop the patient's history.
      c. Examine for a medical problem.
      d. Examine for a trauma-related problem.
   2. If a trauma-related problem, the order should be:
      a. Examine for a trauma-related problem.
      b. Develop the patient's history.
      c. Evaluate the diagnostic and vital signs.
      d. Examine for a medical problem.

B. If the patient cannot communicate, the order should be:
   1. Evaluate the diagnostic and vital signs.
   2. Develop the patient's history, then determine if he has a medical or trauma-related problem.
   3. If he has a medical problem—examine for a medical problem, then for a trauma-related problem.
   4. If he has a trauma-related problem—examine for a trauma-related problem, then for a medical problem.

C. Review the priorities for patient assessment in different situations.

D. Present Practice Session 4.

3.7. Presention of medical information

A. Point out that it is important to present information to the emergency department staff in an orderly, concise manner so:
   1. Communication is facilitated

NOTES

2. Details are not omitted
3. Accurate documents are available

B. Discuss the format (suggested)
   1. Age, sex of patient
   2. Chief complaint
   3. Present illness
   4. Past medical history
   5. Physical examination findings
   6. EKG findings
   7. Treatment
   8. Condition during transport

C. Review sample cases and presentation of information.

3.8. Triage

A. Define—sorting of patients according to severity of the injuries.

B. Discuss purpose—select those patients with critical injuries to be treated first.

C. Discuss categories of injuries.
   1. First priority
      a. Airway and breathing difficulties
      b. Cardiac arrest
      c. Uncontrolled bleeding
      d. Severe head injuries
      e. Open chest or abdominal wounds
      f. Severe medical problems, such as poisonings and heart attacks
      g. Severe burns
      h. Severe shock
   2. Second priority
      a. Burns
      b. Major multiple fractures
      c. Back injuries with or without spinal cord damage
   3. Third priority
      a. Minor fractures
      b. Other minor injuries
      c. The obviously dead

D. Give examples of triage situations with details of patients' injuries.

NOTES

Summary

- Review skill and knowledge objectives.
- Review topics.
  - — Purpose of patient assessment
    - a. Primary assessment
    - b. Secondary assessment
  - — Components of patient assessment
    - a. Patient history
    - b. Evaluation of diagnostic signs
    - c. Examination for suspected medical problem
    - d. Examination for suspected trauma-related problem
  - — Review patient assessment procedure.
  - — Review triage.

NOTES

Demonstration 3.1.1.S: Primary Assessment

NOTES

Equipment

Manikin
Student acting as patient

Procedure

Demonstrate so all students can see and hear.
Discuss the steps as you perform them.
Tell the students they may want to take notes during the demonstration.

Steps

1. Visually inspect the scene to determine:
   a. The number of patients
   b. Which patients obviously require immediate treatment
   c. If any immediate hazards are present that might impair treatment efforts
2. Move to one side of the chosen patient.
   a. If the patient is moving about, have him sit or lie down.
   b. Determine whether the patient is responsive.
   c. Determine whether the patient can communicate.
3. If the patient can communicate:
   a. Visually inspect the body from head to toe, looking for:
      (1) Severe hemorrhage
      (2) Sucking chest wound
   b. Determine whether the patient is having acute respiratory difficulty (visual inspection).
4. If the patient cannot communicate:
   a. Determine whether the patient is having respiratory difficulty.
      (1) Airway patient
         (a) Check the cervical spine.
         (b) Open the airway.
            (i) Procedure if there is no cervical injury
            (ii) Procedure if there is cervical injury
      (2) Determine whether respiration is present (look, listen, feel).

b. Determine whether the patient's pulse is present by checking the carotid artery.

c. Visually inspect the body from head to toe, looking for:

(1) Severe hemorrhage

(2) Sucking chest wound

5. If life-threatening problems are:

a. Present

(1) Treat the problems.

(2) Perform a secondary assessment after all life-threatening problems are controlled for all patients.

b. Absent

(1) Perform primary assessments for the other patients, if present.

(2) Perform secondary assessment after all severe problems are controlled for all patients.

NOTES

NOTE: After the demonstration, ask the students if they have any questions or if they would like to see part of the demonstration repeated. Depending on the approach and schedule, the instructor may want the students to practice at this time or at least have one student repeat the demonstration, with the instructor talking the student through the skill, pointing out the errors.

Demonstration 3.3.1.S: Secondary Assessment of the Head for Traumatic Injury

NOTES

Equipment

Fellow student posing as a victim
Pen light

Procedures

Demonstrate the steps involved in the task so all the students can see and hear.

Discuss each step as it is demonstrated.

Tell the students they may want to take notes during the demonstration.

Tell the students to assume there is no cervical spine trauma (determined during primary assessment).

Steps

1. Inspect the scalp for:
   a. Bleeding
   b. Ecchymosis
   c. Scalp lesions
2. Palpate the scalp for:
   a. Lumps
   b. Depressions
   c. Pain on compression of skull
3. Inspect the eyes for:
   a. Lacerations to the lid or globe
   b. Foreign matter in the eye
   c. Anisocoria
   d. Eye movements
   e. Light reaction
4. Palpate the orbital area for:
   a. Swelling in orbital or periorbital area
   b. Failure to sense touch in supra- and infraorbital area
5. Inspect the auricular area for:
   a. Discharge from the external auditory canal
   b. Ecchymosis over the mastoid (Battle's sign)

c. Lacerations
d. Bleeding

6. Palpate the auricular area for lumps.
7. Inspect the nose for:
   a. Presence of rhinorrhea
   b. Patency of the nostrils
   c. Bleeding from the nose
   d. Flaring of the anterior nares
8. Inspect the mouth for:
   a. Patency of airway
   b. Edema or hematoma
   c. Bleeding
   d. Teeth or dentures lodged in the pharynx
   e. Alignment of the teeth
   f. Pain on biting
9. Palpate the face for:
   a. Lumps
   b. Edema

NOTE: After the demonstration, ask the students if they have any questions or if they would like to see part of the demonstration repeated. Depending on the approach and schedule, the instructor may want the students to practice at this time or at least have one student repeat the demonstration, with the instructor talking the student through the skill, pointing out the errors.

NOTES

Demonstration 3.3.2.S: Secondary Assessment of the Body and Extremities for Traumatic Injury

NOTES

Equipment

Student posing as a victim
Stethoscope

Procedures

Demonstrate so all the students can see and hear.
Discuss each step as it is demonstrated.
Suggest that the students take notes.

Steps

1. Inspect the neck for:
   a. Retraction at the suprasternal notch
   b. Lacerations, ecchymosis, bites
   c. Tracheal deviation
2. Palpate the neck for:
   a. Tenderness
   b. Deformity
3. Auscultate the neck for air sounds in the trachea.
4. Inspect the thorax.
   a. Check elevation, symmetry, deformity.
   b. Look for lacerations, punctures, ecchymosis.
5. Palpate the thorax for:
   a. Symmetry, deformity
   b. Irregularities of the ribs
   c. Pain on compression of the thorax:
      (1) Anterior to posterior
      (2) Lateral to lateral
   d. Pain on compression of the clavicle
   e. Pain on cranial to chordal compression
   f. Pain on pressure to the costochondral junction
   g. Pain on compression of the costovertebral angles
6. Percuss the body (chest, back, or abdomen) for equal tone.
7. Auscultate the thorax for:
   a. Lung sounds
      (1) Where to place stethoscope

(2) Pattern to follow
(3) What to listen for—stress equality of breath sounds

b. Heart sounds
(1) Where to place stethoscope
(2) What to listen for

8. Inspect the abdomen for:
   a. Lacerations, ecchymosis
   b. Flexion of hips to relieve pain
   c. Contour during breathing
9. Auscultate for bowel sounds.
10. Palpate the abdomen for:
   a. Distention
   b. Local tenderness
11. Inspect the extremities for:
   a. Abnormal angulation, bone ends
   b. Lacerations, ecchymosis
   c. Needle marks, bites
   d. Nail bed color
   e. Inability to move joints
   f. Paralysis
12. Palpate the extremities for:
   a. Pulse
   b. Pain
   c. Swelling or abnormal contour
   d. Impaired sensation
   e. Impaired strength

NOTE: After the demonstration, ask the students if they have any questions or if they would like to see part of the demonstration repeated. Depending on the approach and schedule, the instructor may want the students to practice at this time or at least have one student repeat the demonstration, with the instructor talking the student through the skill, pointing out the errors.

NOTES

Demonstration 3.4.1.S: Assessment of Diagnostic and Vital Signs

NOTES

Equipment

Student posing as a victim
Pen light
Wristwatch
Sphygmomanometer
Stethoscope

Procedure

Have all the equipment ready before the demonstration begins.
Demonstrate so all the students can see and hear.
Discuss each step as it is demonstrated.
Suggest that the students take notes during the demonstration.

Steps

1. Determine the victim's mental status.
2. Monitor the victim's respirations. Show how to:
   a. Listen for respirations
   b. Feel for respirations and count
   c. Differentiate between hyperpnea, hypopnea, and tachypnea
3. Monitor the victim's pulse. Show how to obtain:
   a. Radial pulse
   b. Carotid pulse
   c. Femoral pulse
   d. Evaluate strength, rhythm, and rate of pulse
4. Evaluate the findings of pulse monitoring. Point out that the pulse may be:
   a. Absent
   b. Rapid and strong
   c. Rapid and weak
5. Determine the victim's skin color. Indicate the best locations to determine color.
6. Take the victim's blood pressure using a sphygmomanometer. Indicate the following:
   a. Parts of a sphygmomanometer (cuff) and names
   b. Where to place cuff

c. Alternate positions for blood pressure
d. Parts and names of a stethoscope
e. Where to place stethoscope and how to hold
f. How to inflate cuff
g. How to obtain systolic and diastolic pressure readings
h. How to obtain systolic pressure by palpation

7. Evaluate the pressure obtained. Indicate the major signs and decision points concerning:
   a. Variance of blood pressure with respect to age and sex
   b. Critical pressure levels (both high and low)
   c. Systolic and diastolic critical readings
   d. What is indicated by a blood pressure reading
8. Determine if paralysis is present. Demonstrate:
   a. Conscious victim
   b. Unconscious victim
9. Determine the location of paralysis such as:
   a. Lower extremities
   b. Upper extremities
   c. Limited paralysis to one side

NOTE: After the demonstration, ask the students if they have any questions or if they would like to see part of the demonstration repeated. Depending on the approach and schedule, the instructor may want the students to practice at this time or at least have one student repeat the demonstration, with the instructor talking the student through the skill, pointing out the errors.

NOTES

Demonstration 3.5.1.S: Secondary Assessment for Suspected Medical Problem

NOTES

Equipment

Student posing as a victim
Stethoscope
Pen light

Procedure

Demonstrate so all the students can see and hear.
Discuss each step as it is demonstrated.
Suggest that the students take notes during the demonstration.

Steps

1. Inspect the neck for jugular vein distention
   a. Describe the location of the jugular vein.
      (1) Inspect the neck.
      (2) Remember that the patient's position is important.
   b. Demonstrate the procedure for observing vein distention.
2. Inspect the thorax for respiration—symmetry, evidence of respiratory distress.
3. Auscultate the thorax for:
   a. Lung sounds
   b. Heart sounds
4. Percuss the thorax—point out:
   a. Method to use
   b. Pattern to follow
   c. What to listen for
   d. Why it is used
   e. General inapplicability in emergency situations
5. Inspect the abdomen for:
   a. Flexion of the hips to relieve pain
   b. Contour of the abdomen during breathing
   c. Distention
6. Auscultate the abdomen for bowel sounds.
7. Palpate the abdomen.
   a. Point out the following:
      (1) Pattern of palpation

(2) Necessity of starting away from the complaint and moving toward the area of complaint—this gains patient's confidence
(3) One-hand versus the two-hand method
(4) Necessity to increase the intensity on later palpations

b. Identify:
(1) Distention
(2) Guarding
(3) Local tenderness
(4) Referred pain

8. Inspect the neck and spinal column.
a. Discuss the purpose.
b. Describe the activities:
(1) Inspection
(2) Palpation
c. Demonstrate the procedure.

NOTE: After the demonstration, ask the students if they have any questions or if they would like to see part of the demonstration repeated. Depending on the approach and schedule, the instructor may want the students to practice at this time or at least have one student repeat the demonstration, with the instructor talking the student through the skill, pointing out the errors.

NOTES

Practice Session 1

Equipment

Manikin or student posing as a victim

Skills

3.1.1.S Primary assessment

Procedure

Divide the class into groups of two (let the students rotate in performing the skill).

Circulate among the students and assist them, correcting any errors.

Practice Session 2

Equipment

Manikin or student posing as a victim
Stethoscope (one for each student)

Skills

3.3.1.S Secondary assessment of the head for traumatic injury
3.3.2.S Secondary assessment of the body and extremities for traumatic injury

Procedure

Divide the class into groups of two (let the students rotate in performing the skills).

Circulate among the groups and assist the students, correcting any errors.

Practice Session 3

Equipment

Sphygmomanometer (one for every two students)
Stethoscope (one for every student)

NOTES

Pen light (one for every student)
Wristwatch

Skills

3.4.1.S Assessment of diagnostic and vital signs
3.5.1.S Secondary assessment for a suspected medical problem

Procedure

Divide the class into groups of two and tell the students to perform (practice) both skills on each other.

Circulate among the groups and assist the students, correcting any errors.

Practice Session 4

Equipment

Makeup kit to simulate injuries (moulage kit)
Blood pressure cuff (one per group of four students)
Stethoscope (one per group of four students)
Pen light (one per group of four students)
Watch (one per group of four students)
Description of the situation (copies to the student role-playing an EMT and to the student observer)
Victim's responses and behaviors (copies to the victim and to the student observer)
Bystanders' responses and behaviors (copies to the bystanders and to the student observer)
Observers' evaluation sheets (copy only to the student observer)

Skills

- Obtaining a patient's history (immediate and medical)
- Primary assessment
- Secondary assessment

Procedure

This practice session is designed as a simulation exercise (game).

NOTES

There are five situations or simulations. Most of the simulations require four individuals:

- The student posing as the victim
- The student posing as an active bystander
- The student role-playing the EMT
- The student acting as an observer/evaluator

The purpose of the exercise is to help the students learn how to obtain a patient's history and conduct a primary and secondary assessment in as realistic an environment as possible. It is not the purpose of this exercise to have the students diagnose the individual patient's problems and recommend a treatment. As a potential training exercise, however, the student should not be discouraged from doing so.

The following procedures should be followed:

- A day or so before this exercise is to take place, groups of three or four students should be formed, depending on the situation. Each student will role-play each of the assigned roles, one in each simulation.
- Each student should be given the sheet or sheets appropriate for his role a day or so before the exercise is to take place. The students should be given the following instructions:

  — Memorize the information on the sheets.
  — Do not share your sheets with other members of the group, particularly the evaluation sheets.
  — Try to be as realistic as possible when playing your part. Use makeup, etc.

- The day of the exercise, have the students break up into their groups and start their simulations.
- After each simulation, the students should regroup and criticize the performance of the student who was the EMT. At this time, the group may want to speculate on treatment.

If you, as the instructor, feel that the students are going to have problems implementing the simulations, you may want to enact one of the simulations before the exercise is begun. To do this, just follow

NOTES

the procedures listed above for a select group of three students—you play the role of the student EMT.

NOTES

Situation 1: EMT and Bystander

At 8 p.m., a call was received to go to 6723 Shady Avenue; white brick house. A relative, who opens door, is very upset. Patient is sitting on couch in the living room; he does not feel well. You are to assume that the relative will not be available for questioning. You are to do a patient assessment, record the information and results of the patient assessment, and communicate them to the hospital (i.e., observer). You will be given only a blood pressure cuff, stethoscope, pen light, and watch. You are not to treat the patient.

Situation 1: Victim's Responses and Behaviors

Procedures

Given the following information, you are to role-play the part of the victim; try to be as realistic as possible. You are permitted to give information to the student playing the EMT only if he or she asks for it; that is, do not volunteer any information. The student role-playing the EMT may not ask for the information in the order in which it is listed here. Thus, you are to memorize this information. You should try not to use this sheet during the actual exercise.

Scenario (heart failure)

When the EMT finds you, you are to be sitting on the couch or chair.

- You are (give your age and sex, if and when asked).
- You are to be responsive and communicative.
- Your mental state is alert but apprehensive.
- You have chest pain radiating down the left arm. The pain is a squeezing pain, steady and sharp. The pain started 2 hours ago, just as you began to read the paper after dinner, and it is getting worse. You have no other complaints and nothing seems to be alleviating the pain.
- Your physician is Dr. John Smith.
- You have been taking nitroglycerin. Approximately 1 hour

ago, you took two nitroglycerin tablets, but they have had no effect.

- In the past, you have had two attacks, the most recent being 2 years ago.
- Last year you had a broken ankle.
- You have never had surgery, and you have no allergies.
- You did not fall or have any trauma problems.

If the student role-playing the EMT asks you any other questions or for information that is not on this sheet, respond by saying, "I don't know," "I am not sure," or "No," unless it is a question that has no relationship to your condition.

Situation 1: Observer—Evaluation Sheet

Procedure

Observe the student role-playing the EMT and check to see if the following minimum activities were accomplished. Did the student:

	Yes	No
1. Take a patient history, determining:		
a. Chest pain	___	___
b. Squeezing pain, steady and sharp	___	___
c. Pain started 2 hours ago	___	___
d. Pain started after finished eating	___	___
e. No alleviating factors	___	___
f. Age and sex	___	___
g. Physician's name	___	___
h. Current medication is nitroglycerin	___	___
i. Nitroglycerin tablet taken an hour ago—no effect	___	___
j. Two attacks, most recent 2 years ago	___	___
k. Broken ankle—1 year ago	___	___
l. No recent surgery	___	___
m. No allergies	___	___
2. Establish responsiveness	___	___

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	Yes	No
3. Take blood pressure	___	___
4. Take pulse	___	___
5. Evaluate respirations	___	___
6. Check lung sounds	___	___
7. Check for jugular vein distention	___	___
8. Determine that there is no trauma-related problem	___	___

List other activities accomplished

_____

_____

_____

When the student has completed his patient assessment, direct him to assume you are hospital personnel and to communicate to you the results of the assessment. Check to see if the following is communicated:

	Yes	No
1. Important history:		
a. Age, sex	___	___
b. Time the pain started	___	___
c. Medication taken	___	___
d. Past attacks	___	___
2. Pulse (rate and rhythm)	___	___
3. Blood pressure	___	___
4. Respirations	___	___

NOTES

	Yes	No
5. Mental status	___	___
6. Lung sounds—chief complaint	___	___
7. Presence of jugular vein distention	___	___

After this, review the evaluation sheet with the student and inform him of the information he failed to get, or what activities he failed to perform. Also, at this time you may want to ask how the student knew there was no trauma-related problem.

Situation 2: EMT

Call received at 1:30 p.m. to go to 4330 Forbes Avenue. On arrival, a police car is present and a large crowd is milling around. The patient is lying face down on the sidewalk. The patient is well dressed. You are to do a patient assessment, record the information and results of the assessment, and communicate them to the hospital (i.e., observer). You will be given only a blood pressure cuff, stethoscope, pen light, and watch. You are not to treat the patient.

Situation 2: Responses and Behaviors of the Bystanders

Situation

You found the patient on the sidewalk, face down, and called the ambulance.

Procedure

When being questioned by the student role-playing the EMT, you are to tell him only the following, if he asks:

- You saw nothing.
- You called the ambulance 5 minutes ago.
- You do not know if the patient fell.
- You do not know the patient.

NOTES

Situation 2: Victim's Responses and Behaviors

Procedure

Given the following information, you are to role-play the part of the victim; try to be as realistic as possible.

Scenario

When the EMT finds you, you are to be lying on the ground, prone, with your face to one side.

- You are to be unconscious, unresponsive, and noncommunicative.
- You are wearing a Medic Alert tag—diabetic.
- Your airway is open and you have a pulse.
- You assume that you have no trauma-related problem.

Do not respond at all to the questions of the student acting as the EMT.

Situation 2: Observer—Evaluation Sheet

Procedure

First, make sure that the patient is lying on the ground, prone, face to one side. There should be a crowd around, but none of the bystanders actually witnessed what happened.

Observe the student role-playing the EMT, and check to see if the following minimum activities were accomplished. Did the student:

	Yes	No
1. Establish unresponsiveness	___	___
2. Determine mental status as unconscious	___	___
3. Appraise the skin	___	___
4. Check respirations	___	___

NOTES

	Yes	No
5. Take blood pressure	___	___
6. Take pulse	___	___
7. Conduct a secondary survey		
a. Head	___	___
• Ears	___	___
• Nose	___	___
• Eyes	___	___
• Mouth	___	___
b. Neck	___	___
c. Chest	___	___
d. Abdomen	___	___
e. Extremities	___	___
f. Back	___	___
8. Notice the Medic Alert tag—diabetic	___	___
9. Attempt to gather information from the crowd	___	___

List other activities accomplished.

_____

_____

_____

When the student has completed the patient assessment, direct him to assume you are hospital personnel and to communicate the situation to you. Check to see if the following information is communicated:

	Yes	No
1. History		
a. Patient's approximate age and sex	___	___
b. Description of situation	___	___

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NOTES

	Yes	No
2. Mental status (unconscious)	___	___
3. Blood pressure reading	___	___
4. Pulse (rate and rhythm)	___	___
5. Respirations (rate and rhythm)	___	___
6. Presence of Medic Alert tag—diabetic	___	___
7. No signs of trauma	___	___

Situation 3: EMT*

Call is received at 4:30 p.m. to go to 4330 Beacon Street; large apartment building. Patient is in apartment 14B. Patient is found lying supine on the couch. The patient called the ambulance himself.

You are to do a patient assessment, record the information and results, and communicate it to the hospital. You will only be given a blood pressure cuff, stethoscope, pen light, and watch.

Situation 3: Responses and Behaviors of the Victim

Procedure

Given the following information, you are to role play the part of the victim (try to be as realistic as possible). You are permitted to give the information to the student role-playing the EMT, only if he or she asks for it; that is, do not volunteer any information. The student role-playing the EMT may not ask for the information in the order in which it is listed here. Thus, you are to memorize this information. You should try not to use this sheet during the actual exercise.

*No bystander in this situation.

Scenario

When the EMT finds you, you are to be lying on a couch on your back. Try to be as realistic as possible to simulate the conditions and symptoms.

- You are (give your age and sex, if and when asked).
- You are to be responsive and communicative; that is, you can answer questions.
- You are to act alert but apprehensive (act frightened).
- You have abdominal pain (hematemesis), you have vomited four times. When you first started, it was coffee (ground type), now seems bloody. You started to have the pain in the middle of the night; the vomiting started about 4 hours ago. You cannot seem to eat anything. In the last 8 hours, you have taken four Alka-Seltzers and five or six Tums; they do not seem to help.
- You went to a cocktail party last night and drank and ate a little too much.
- Medical history:

  — For the past year, you have often had headaches and nausea.
  — Your doctor is (give name of your own family physician).
  — Your physician is treating you for an ulcer (he thinks this is the cause of headaches and nausea).
  — You are currently taking no medication other than Alka-Seltzer and Maalox every night before bedtime.

- When asked, you are to inform the EMT that you did not fall and have no other discomfort other than the abdominal pain.
- When and if the EMT examines your abdomen, you are to have tenderness over the epigastrium. Describe the pain on touch as severe and sharp.

If the student role-playing the EMT asks you any other questions or for information that is not on this sheet, respond by saying, "I am not sure," or "I do not know," unless the question has no relationship to the condition of the patient you are assuming.

NOTES

Situation 3: Observer—Evaluation Sheet

NOTES

Procedure

Observe the student role-playing the EMT as he or she performs the patient assessment, and check to see if the following minimum activities were accomplished. Did the student:

	Yes	No
1. Take a patient history, determining:		
a. Chief complaint (abdominal pain)	___	___
b. Tenderness over the epigastrium	___	___
c. Vomiting and the type of vomit	___	___
d. When the pain started	___	___
e. When the vomiting started	___	___
f. What medication was taken (four AlkaSeltzers and five or six Tums)	___	___
g. That the medication has had no effect	___	___
h. That the patient cannot eat	___	___
i. That the patient attended a cocktail party last night	___	___
j. That there are no other complaints	___	___
k. That patient has had headaches and nausea, which started about a year ago	___	___
l. Name of patient's physician	___	___
m. Physician is treating for ulcer	___	___
n. Medication is Alka-Seltzer and Maalox before bedtime	___	___
2. Establish responsiveness	___	___
3. Take blood pressure reading	___	___
4. Take pulse evaluation	___	___
5. Check for abdominal sounds	___	___
6. Palpate abdomen	___	___

	Yes	No
7. Determine no trauma-related problems	___	___

List other activities accomplished

_____

_____

_____

When the student has completed his patient assessment, ask him to assume that you are from the hospital and to communicate the results of the assessment to you. Check to see if the following information is communicated:

	Yes	No
1. History		
a. Patient's age and sex	___	___
b. Chief complaint (abdominal pain)	___	___
c. Quality of abdominal pain (severe and sharp)	___	___
d. Being treated for ulcers	___	___
e. Attended cocktail party	___	___
f. Presence of vomiting and when	___	___
g. Type of vomit	___	___
h. Medication given	___	___
i. Time medication taken	___	___
2. Mental status (alert, communicative)	___	___
3. Pulse (rate and rhythm)	___	___
4. Blood pressure reading	___	___
5. Respirations (rate and rhythm)	___	___
6. Quality of abdominal sounds	___	___
7. That there is no apparent trauma	___	___

NOTES

After this, review the evaluation sheet with the student and inform him of the information he failed to get or the activities he failed to perform.

NOTES

Situation 4: EMT

Call received at 1:30 p.m. to go to 4330 Forbes Avenue. On arrival, police car is present and a large crowd is milling around. A bystander is familiar with the patient and saw everything. Patient is lying face up on sidewalk, below a flight of concrete steps. Patient is dressed in torn and dirty clothes.

You are to do a patient assessment, record the information and results, and communicate them to the hospital upon request. You will be given only a jump kit. You are not to treat the patient.

Situation 4: Bystander's Behavior and Responses

Procedure

The patient will be unconscious, he is in torn and dirty clothes. You are his longtime buddy and you were with him the whole day. Below is the information you know. You are permitted to give this information only when and if asked for it by the student role-playing the EMT. That student may not ask for the information in the order in which it is listed here. Thus, you are to memorize this information. Try not to use this sheet during the actual exercise. Try to act concerned and excited.

Scenario

What Happened. You and the patient had been killing time together all day. You had a few drinks in a bar down the street and decided to walk to another bar. Neither of you had an excessive amount to drink. When you got to the top of the steps, your buddy said, "I don't feel so good." As you started to walk down the steps, your buddy seemed to collapse and fell the rest of the way down. There was nothing you could do to catch him.

The Patient's Background. When asked about the student role-playing the victim, you are to know only the following:

- His name (give name of patient).
- His age (give age of patient).
- He had been taking medication for the last month or two for a severe case of the flu. (You do not know what medication or the amount taken.) You did see him take two pills this morning, however. The container is in his pocket.
- You do not know his doctor's name.
- You do not know the last time he went to the doctor.
- This has never happened before when you were together.
- You both ate about 3 hours ago at McDonald's—hamburgers.
- The patient was in an automobile accident about 2 years ago. He was in the hospital with a broken leg and some cuts on his forehead.

If the student role-playing the EMT asks you for information not on this list, you are to respond by saying, "I do not know," unless the questions are unrelated to the patient's condition. Remember, you are to act excited and extremely concerned.

Situation 4: Victim's Responses and Behaviors

Procedure

You have fallen down a flight of stairs. You are lying face up on the ground, unconscious and you cannot communicate. Your clothes are torn and dirty. You have some antibiotics in your coat pocket.

If the situation permits, you should simulate the following with makeup:

- A bleeding laceration on the forehead
- Clear fluid draining from your ear
- Cervical spine deformity
- A bleeding fracture below the knee

Since you are unconscious, you are to say nothing.

Situation 4: Observer—Evaluation Sheet

Procedure

Read the sheets for the victim and bystander. Observe the student who is role-playing the EMT, conducting the patient assessment, and

NOTES

questioning the bystander. Check to see if the following activities were accomplished. Did the student:

NOTES

	Yes	No
1. Question the bystander to determine:		
a. What happened	____	____
b. Patient's name and age	____	____
c. Medication taken (antibiotics)	____	____
d. Location of medication	____	____
e. Past medical history (auto accident a year ago)	____	____
2. Establish unresponsiveness	____	____
3. Evaluate the respirations	____	____
4. Take a pulse reading	____	____
5. Take a blood pressure reading	____	____
6. Perform a complete secondary survey		
a. Head (bleeding laceration)	____	____
b. Ears (clear fluid)	____	____
c. Nose (nothing observed)	____	____
d. Mouth (nothing observed)	____	____
e. Neck (cervical spine deformity)	____	____
f. Chest (nothing)	____	____
g. Abdomen (nothing)	____	____
h. Extremities (bleeding fracture below the knee)	____	____
i. Back (nothing)	____	____

After the student has completed his patient assessment, direct him or her to assume that you are from the hospital and to communicate to you the results of the assessment. Check to see if the following information is communicated:

	Yes	No
1. Medical history (current medication, etc.)	____	____

	Yes	No
2. Description of situation	___	___
3. Pulse (rate and rhythm)	___	___
4. Blood pressure reading	___	___
5. Mental status (unconscious)	___	___
6. Injuries		
a. Laceration on forehead	___	___
b. Clear fluid draining from ear	___	___
c. Cervical spine deformity	___	___
d. Bleeding fracture below the knee	___	___
7. Respirations (rate and rhythm)	___	___

NOTES

Review the evaluation sheet with the student when you have completed it. Point out the information he failed to get or the activities he failed to perform.

Situation 5: EMT

Call received at 10:30 a.m. Mother (father) of small child needs ambulance right away at 3220 Fifth Avenue, first floor. Child is crying, and mother (father) is upset. You are to do a patient assessment, record the information, and communicate it to the hospital (upon request of the instructor). You will only be given a jump kit.

Situation 5: Mother's (Father's) Responses and Behaviors

Procedure

You are to be the mother (father) of the victim, a small child. You are to be concerned and upset (mad) but not hysterical. Assume that you have abused the child and want to hide the facts. Below is your story; you are permitted to give this information only when and if asked for it by the student role-playing the EMT. The student role-

playing the EMT may not ask for the information in the order in which it is listed here. Thus, you are to try to memorize this information. Try not to use this sheet during the actual exercise.

Scenario

What Happened. [illegible] have really abused the child; this is not the first time. When the EMT questions you, you are to give him this false story:

> I was in the kitchen making lunch for me and my child. He was playing in the living room. All of a sudden I heard this crash and rushed into the living room, and my child was under the bookcase. He must have tipped it over on himself.

When and if questioned about the child's medical history, you are to give the following "true" information:

- The patient is 10 years old.
- Your doctor's name is (give your doctor's name).
- Your child is not taking any medication.
- He has had no surgery.
- He has had the following injuries within the last 5 years:

  — Several broken fingers
  — A laceration on the head that needed eight stitches
  — A broken arm (right)
  — A broken ankle (left)
  — A badly bruised eye (right)
  — Severe burns on the hands

  (If questioned, make up a story about how these happened.)

- If questioned about the black eye that your child has, you are to tell the EMT he has had it for a day or so—a neighborhood child punched him.

You are not to volunteer any information. If questioned about things not on this list, try to respond, but respond in character.

NOTES

Situation 5: Victim's Responses and Behaviors

Procedure

You are to be a small child who has been abused by his mother (father). You are, however, to substantiate any story given by your mother (father). You are not to admit that she (he) has beaten you. Try to cry a lot, and try to avoid answering any questions; let your parent do most of the talking. You are to have the following injuries, and if asked, you can tell how you fell and describe the pain. If the situation permits, use makeup to simulate the injuries.

- You should be alert and crying loudly and continually.
- You have a scalp laceration with bleeding (if anyone touches it, scream and cry).
- You have black-and-blue marks on your upper arms.
- You have one black eye.
- You are bleeding inside your mouth from a cut on your upper lip, which is swollen.
- You have a bad cut on your forearm, which is bleeding profusely.

Situation 5: Observer—Evaluation Sheets

Procedure

Read the situation and the sheets given to the victim and the victim's parent.

Observe the student role-playing the EMT and check to see if the following minimum activities were accomplished. Did the student:

	Yes	No
1. Obtain a patient history, determining		
a. Mother's (father's) story of what happened	___	___
b. Patient's past medical history (past injuries)	___	___
c. Doctor's name	___	___
d. Patient's age (10)	___	___
2. Establish responsiveness	___	___

NOTES

	Yes	No
3. Take blood pressure reading	___	___
4. Take pulse	___	___
5. Evaluate respirations	___	___
6. Conduct secondary survey		
a. Head (scalp laceration)	___	___
b. Ears (nothing)	___	___
c. Nose (nothing)	___	___
d. Eyes (black eye)	___	___
e. Mouth (swollen lip, bleeding from cut inside mouth)	___	___
f. Neck (nothing)	___	___
g. Chest (nothing)	___	___
h. Abdomen (nothing)	___	___
i. Extremities	___	___
• Black-and-blue marks on both arms	___	___
• Laceration on forearm	___	___
j. Back (nothing)	___	___

List other activities performed.

_____

_____

_____

When the student has completed the patient assessment, ask him to assume you are from the hospital and that he is to communicate to you the results of the assessment. Check to see if the following information was communicated:

	Yes	No
1. Medical history (past problems/injuries)	___	___
2. Description of situation	___	___

NOTES

	Yes	No
3. Mental status (crying but alert)	___	___
4. Pulse	___	___
5. Blood pressure reading	___	___
6. Respirations	___	___
7. Injuries		
a. Scalp lacerations	___	___
b. Black-and-blue marks on upper arms	___	___
c. Black eye (perhaps obtained a few days ago)	___	___
d. Laceration on forearm	___	___
e. Swollen lip and bleeding from inside of mouth	___	___

When this has been completed, review the results of the completed evaluation sheet with the student. Point out the information he failed to obtain or the activities he failed to accomplish.

NOTES

Student's name _____

Date _____

Pass 1 2 3

Fail 1 2 3

Skill Evaluation 3.6.1.S: Assessment of a Communicative Patient With a Suspected Medical Problem

Place an "X" in the appropriate column to indicate steps that are incorrect, out of sequence, or omitted. The student should be given three attempts to perform the skill.

Equipment

Student posing as a victim
Stethoscope
Sphygmomanometer
Pen light
Watch (with second hand)
Pencil and paper

Procedure

Inform the student that in front of him is a patient with a suspected medical problem. Using only the equipment given, he is to:

- Conduct a primary assessment
- Obtain diagnostic and vital signs
- Conduct a complete secondary assessment
- Obtain a history of the patient

NOTES: (1) The steps and information listed need not be done or collected in the order presented.

(2) This skill evaluation and the one entitled "Assessment of an Unconscious Patient With a Suspected Traumatic Injury" can be set up with skill stations, where the students rotate through the two stations.

NOTES

Steps

___ ___ ___ A. Perform primary assessment (may only be necessary to speak to patient to accomplish step).

___ ___ ___ 1. Establish consciousness.

___ ___ ___ 2. Establish an airway.

___ ___ ___ 3. Check for breathing.

___ ___ ___ 4. Check circulation.

a. Pulse
b. Severe hemorrhage

___ ___ ___ B. Evaluate diagnostic and vital signs (should be taken while gathering history).

___ ___ ___ 1. Respirations

___ ___ ___ 2. Pulse

___ ___ ___ 3. Blood pressure

___ ___ ___ C. Perform secondary assessment (should be done while gathering history). Secondary assessment will depend on medical problem selected by the evaluator. The evaluaton should list those steps to be included according to inspection, auscultation, palpation, and percussion.

(Instructor: With respect to steps D-F, the student should collect all information from the patient, irrespective of order.)

___ ___ ___ D. Gather information history (can be done while taking vital signs).

___ ___ ___ 1. Identify the chief complaint.

a. Location
b. Type

NOTES

c. Severity
d. Duration

___ ___ ___ 2. When did symptom occur

___ ___ ___ 3. Aggravating or alleviating factor(s)

___ ___ ___ 4. Other complaints than the major one

___ ___ ___ E. Gather medical history.

___ ___ ___ 1. General health

___ ___ ___ 2. Current medical problems

___ ___ ___ 3. Physician

___ ___ ___ 4. Medication

___ ___ ___ 5. Recent surgery

___ ___ ___ 6. Previous injuries

___ ___ ___ 7. Allergies

___ ___ ___ F. Determine if trauma is present (may be determined by asking a question).

NOTES

Student's name _____

Date _____

Pass 1 2 3

Fail 1 2 3

Skill Evaluation 3.6.1.S: Assessment of Noncommunicative, Unconscious Patient With Suspected Trauma-Related Problem

Place an "X" in the appropriate column to indicate steps that are incorrect, out of sequence, or omitted. The student should be given three attempts to perform the skill.

Equipment

Fellow student posing as a victim
Stethoscope
Sphygmomanometer
Pen light
Watch (with second hand)

Procedure

Inform the student that in front of him is an unconscious patient with a suspected traumatic injury. Using only the equipment given him, he is to:

- Perform a primary assessment
- Obtain diagnostic and vital signs
- Perform a complete secondary assessment

Since the victim is unconscious, participate as a bystander and inform the student that he witnessed the victim slip on a roller skate and fall down a flight of 15 stairs.

Make sure the patient is in a supine position.

Inform each student that he has three attempts to perform successfully.

Inform the student that he will be asked one question following the skill evaluation.

NOTES

NOTE: Because of the type of situation, the student will not be able to gather any history.

NOTES

Steps

___ ___ ___ A. Perform a primary assessment.

___ ___ ___ 1. Visually check the patient.

___ ___ ___ 2. Check for responsiveness.

___ ___ ___ 3. Open an airway.

___ ___ ___ 4. Check the breathing.

___ ___ ___ 5. Check the pulse.

___ ___ ___ 6. Inspect for external hemorrhage.

___ ___ ___ B. Evaluate the diagnostic and vital signs.

___ ___ ___ 1. Respirations

___ ___ ___ 2. Pulse

___ ___ ___ 3. Blood pressure

___ ___ ___ C. Perform a secondary assessment of the head.

___ ___ ___ 1. Inspect the scalp.

___ ___ ___ 2. Palpate the scalp.

___ ___ ___ 3. Inspect the eye—pupils, eye movements.

___ ___ ___ 4. Palpate the orbital area.

___ ___ ___ 5. Inspect the auricular area.

___ ___ ___ 6. Inspect the nose.

___ ___ ___ 7. Inspect the mouth.

___ ___ ___ 8. Palpate the face.

___ ___ ___ 9. Palpate the neck.

___ ___ ___ D. Perform a secondary assessment of the neck and thorax.

___ ___ ___ 1. Inspect the neck.

___ ___ ___ 2. Palpate the neck.

___ ___ ___ 3. Inspect the thorax.

___ ___ ___ 4. Palpate the thorax.

___ ___ ___ 5. Percuss the thorax.

___ ___ ___ 6. Auscultate the thorax.

___ ___ ___ 7. Palpate the spinal cord.

___ ___ ___ E. Perform a secondary assessment of the abdomen.

___ ___ ___ 1. Inspect the abdomen.

___ ___ ___ 2. Auscultate the abdomen.

___ ___ ___ 3. Palpate the abdomen.

___ ___ ___ F. Perform a secondary assessment of the extremities.

___ ___ ___ 1. Inspect the extremities.

___ ___ ___ 2. Palpate the extremities.

___ ___ ___ 3. Check for paralysis.

NOTES

Following the evaluation, the instructor should ask the student the following question: When performing the secondary assessment, what are you looking for? (The student must list at least four things.)

NOTES

Acceptable responses:

1. Deformities
2. External hemorrhage
3. Trauma; that is, contusions, lacerations
4. Protruding organs
5. Asymmetrical chest movement during respiration

UNIT 4 emt-p

CLINICAL EXPERIENCE

NOTES

Description of Unit

In the previous units, the students were trained to perform skills in simulated situations in the classroom. The purpose of the clinical experience is to provide the students with the opportunity to become proficient in the skills presented in the classroom setting.

If a number of modules are being presented together, it is not necessary for the clinical experience to be presented after each module. The clinical experience associated with each module can be combined and presented upon completion of the classroom sessions.

Objectives

The following objectives are proposed for the clinical experience. Because of patient availability, it is possible that all skills listed below may not be performed by the student, but as many skills as possible should be observed and practiced by the student under the supervision of the preceptor.

Emergency Department

During the experience in the emergency room, the student will have the opportunity to practice on actual patients under direct supervision and to demonstrate with proficiency to the satisfaction of the preceptor. Each student will:

- Perform a patient assessment, including developing relevant medical history and doing a physical examination. The assess-

ment should include, at a minimum, taking and recording vital signs, and auscultation of chest and abdominal sounds.

- Assist and review the treatment of trauma cases and medical emergencies. At a minimum, the student should review cases of:

  — Suspected myocardial infarction
  — Multiple trauma
  — Obstructive pulmonary disease
  — Overdose/poisoning
  — Suspected extremity fracture
  — Massive hemorrhage, any source

- Assist in the triage of patients.

Intensive Care Unit/Coronary Care Unit (ICU/CCU)

During the experience in the ICU/CCU, the students will have the opportunity to practice on actual patients under direct supervision and to demonstrate with proficiency, to the satisfaction of the preceptor. Each student will:

- Perform a patient assessment, including developing a relevant medical history and doing a physical examination. The assessment should include, at a minimum, taking and recording vital signs, and auscultation of chest and abdominal sounds.
- Review all cases, including the patient's chart, diagnosis, and treatment.

Morgue

During the experience in the morgue, the student should have the opportunity to observe the following:

- Basic topographic anatomy, specifically the thoracic cavity and airway
- Identification of pathogenesis and causes of death
- Anatomical basis of endotracheal intubation and cardiopulmonary resuscitation
- Injuries resulting from trauma, specifically injuries to soft tissues, the musculoskeletal system, and the internal organs

NOTES

Upon completion of the clinical experience, the trainee should be involved in a supervised internship on the vehicle. During this internship, the trainee will be supervised by a preceptor (physician, nurse, or certified EMT) in the skills presented during the training program. Guidelines for this internship are identical to those presented for the other clinical areas and should be used as a reference.

NOTES

Preceptor Activities

Review the objectives with the course coordinator and discuss which objectives are to be included in the unit activities. If the preceptor has any questions concerning specific skills or procedures, he should be referred to the appropriate module for a review of the materials presented to the student.

Have the student sign in and determine his proper attire, for example, sterile greens.

Review the rules and operating procedures within the unit, making certain to define the student's role within the unit. Any special regulations concerning the student's activities should be defined.

Define those skills that will and will not be included in this instructional unit, but were discussed during the classroom activities.

Review the history, diagnosis, complications, and treatment of each patient in the unit. The activities of the student should not be limited to those specifically defined in the objectives.

Review the triage process for patient admittance.

Initially demonstrate the skill for each activity, then coach the student through the skill at least one time. Finally, observe the student as he performs the skill.

Supervise the student when he is performing activities within the unit. The preceptor should critically review the student's technique and suggest corrections when appropriate.

Assist and evaluate the student until he is competent in each activity on the checklist.

Answer any of the student's questions concerning activities in the unit or specific patients and their conditions.

Review the objectives for this instructional unit periodically, and discuss the student's progress with respect to the items on the checklist.

Mark the student's activities' checklist after each clinical session.

The checklist should be marked indicating the number of total observations (O), the total of attempts made by the student to perform the activity (T), and the number of successful attempts (S) for each activity. Once the student has successfully demonstrated the skill to the satisfaction of the preceptor, the session number during which the preceptor made the evaluation should be entered in the "Completed" column. Any comments should be listed in the appropriate space. Specifically, comment should be made if the student does not become proficient at any given skill. Once the student has successfully demonstrated his proficiency at a given skill, however, he should still continue to perform the skill while in the unit.

NOTES

Student Activities

The student should:

- Report to the specialty unit on his scheduled date and shift and "sign in" with the supervisor
- Review the rules and operating procedures within the unit with the preceptor, making certain that his role in the unit is defined.
- Review the history, diagnosis, complications, and treatment of each patient in the unit
- Observe and participate in unit activities as directed by the preceptor (If the student observes a technique or procedure performed differently from its presentation during the classroom activities, he may question the preceptor about differences observed, but remember that the techniques presented during the lecture may not be the only correct method.)
- Perform each activity on the checklist (when appropriate) under the direct supervision of the preceptor. (If the student is unsure of the activity, the preceptor will demonstrate the skill.)
- Review each activity performed with the preceptor, and be sure the preceptor critiques his performance
- Be sure the preceptor marks the checklist after each clinical session
- Develop a log on each patient seen during the experience—the log should include the following information as a minimum:

  — Patient's record identification—use identification number rather than patient's name
  — Major problem—that is, trauma, acute appendicitis

- Complications
- Skills and activities observed
- Skills performed—that is, initiated IV, monitored cardiac activity

The preceptor and the student should review the objectives in the instructional unit and discuss which activities will be included in the experience.

NOTES

Emergency Room

Page _____ of _____

Student's name _____

Completed	Activities (objectives)	Session number 1 O	1 T	1 S	2 O	2 T	2 S	3 O	3 T	3 S	4 O	4 T	4 S	5 O	5 T	5 S	Comments
	Perform patient assessment Blood pressure Pulse Respiration Auscultation of lung sounds Auscultation of abdominal sounds Physical examination Assist in triage of patients																
	Preceptor																
	Date																

Note:—O = observations; T = student attempts; S = successful attempts.

Intensive Care Unit/Coronary Care Unit

Page _____ of _____

Student's name _____

Completed	Activities (objectives)	Session number 1			2			3			4			5			Comments
		O	T	S	O	T	S	O	T	S	O	T	S	O	T	S	
	Perform patient assessment Blood pressure Pulse Respiration Auscultation of lung sounds Auscultation of abdominal sounds Patient history Physical examination																
	Preceptor																
	Date																

Note: —O = observations; T = student attempts; S = successful attempts.

Morgue

Page _____ of _____

Student's name _____

Completed	Activities (objectives)	Session number 1			2			3			4			5			Comments
		O	T	S	O	T	S	O	T	S	O	T	S	O	T	S	
	Observe autopsy Basic topographic anatomy Identification of pathogenesis Identification of cause of death Anatomical basis for intubation and CPR Injuries resulting from trauma																
	Preceptor																
	Date																

Note: —O = observations; T = student attempts; S = successful attempts; CPR = cardiopulmonary resuscitation.

Mobile Intensive Care Unit

Page ____ of ____

Student's name _____

Completed	Activities (objectives)	Session number 1 O	1 T	1 S	2 O	2 T	2 S	3 O	3 T	3 S	4 O	4 T	4 S	5 O	5 T	5 S	Comments
	Perform patient assessment Blood pressure Pulse Respiration Auscultation of lung sounds Auscultation of abdominal sounds Patient history Physical examination																
	Preceptor																
	Date																

Note:—O = observations; T = student attempts; S = successful attempts.

U.S. GOVERNMENT PRINTING OFFICE : 1977 O—248-334